California Boating Facilities Needs Assessment

Volume III

Appendices to Statewide and Regional Boaters and Boating Facilities

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State of California

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October 15, 2002

California Boating Facilities Needs Assessment

Primary Contractor to the California Department of Boating and Waterways

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Guide to Five Volume Report
California Boating Facilities Needs Assessment

Volume I	Statewide Boaters and Boating Facilities
Volume II	Regional Boaters and Boating Facilities
Volume III	Appendices to Statewide and Regional Boaters and Boating Facilities
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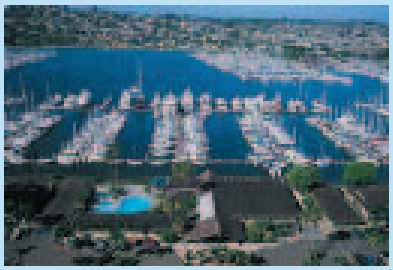


California Boats and Boaters Survey

Appendix A Table of Contents

Appendix A California Boats and Boaters Survey

Appendix A contains four sets of information supplementing and supporting Volumes I and II.

Appendix A1 presents detailed tables and charts describing the registered and documented boats in California and illustrates types of data available for further analysis.

Appendix A2 presents detailed tables of selected responses to the Boater Survey, which again illustrate the extensive data available for further analysis.

Appendix A3 documents sources and methods used to create the boat database.

Appendix A4 similarly documents the methodology of the Boater Survey, and provides calculations of the probability that estimates derived from the survey will accurately represent the population of California boaters at large.

Appendix A5 – provides survey weighting and confidence intervals.

Appendix A6 – provides the actual boater surveys, including:

- PRI Computer-Aided Boater Interview System Questionaire
- Boater Callback Telephone Survey .

Appendix A1
Detailed Characteristics of Registered and Documented Boats for 2000

Table A1.1
Boats by Length and Region

Region	<16'	16′-19'11"	20'-25'11"	26'-39'11"	40'–65′	>65′	Unknown	Total
1. North Coast	17,224	10,947	4,622	1,341	438	65	6	34,643
2. SF Bay Area	69,226	47,094	25,500	12,705	3,337	332	30	158,223
3. Central Coast	13,327	10,154	4,946	1,696	432	57	4	30,617
4. South Coast	127,466	58,961	36,722	17,174	4,449	541	67	245,380
5. San Diego	33,484	17,862	9,585	5,535	1,532	215	18	68,231
6. Northern Interior	4,716	2,388	592	76	16	16	—	7,804
7. Sacramento Basin	79,911	54,630	19,863	4,360	1,491	210	25	160,490
8. Central Valley	57,615	40,757	14,952	3,283	756	160	30	117,552
9. Eastern Sierra	1,802	820	275	40	10	4	—	2,951
10. Southern Interior	52,065	27,465	15,038	2,166	373	155	9	97,272
State Subtotal	**456,837**	**271,077**	**132,095**	**48,377**	**12,834**	**1,755**	**188**	**923,163**
11. Out of State	1,061	492	352	363	96	6	—	2,370
Total	**457,898**	**271,570**	**132,447**	**48,739**	**12,930**	**1,761**	**188**	**925,533**

Sources: DMV, MARAD

Table A1.2
Boats by Length and Propulsion

Propulsion	<16'	16'-19'11"	20'-25'11"	26'-39'11"	40'–65′	>65′	Unknown	Total
Hand	15,073	1,054	63	18	6	24	—	16,238
Sail only	18,372	10,144	6,287	1,807	68	43	—	36,723
Sail with aux	1,396	814	6,029	15,556	3,233	88	—	27,115
Outboard	224,378	102,213	25,091	3,831	833	444	—	356,791
Inboard/Outboard	3,622	112,893	61,918	8,917	1,374	200	—	188,924
Inboard	13,828	21,087	21,858	18,388	7,281	567	4	83,012
Jet	164,933	18,853	9,135	93	22	329	—	193,365
All other	**15,627**	**3,960**	**2,330**	**947**	**249**	**66**	**185**	**23,361**
Total	**457,229**	**271,018**	**132,711**	**49,557**	**13,066**	**1,762**	**189**	**925,533**
Hand	3.3%	0.4%	0.0%	0.0%	0.0%	1.4%	0.0%	1.8%
Sail only	4.0%	3.7%	4.7%	3.6%	0.5%	2.5%	0.0%	4.0%
Sail with aux	0.3%	0.3%	4.5%	31.4%	24.7%	5.0%	0.0%	2.9%
Outboard	49.1%	37.7%	18.9%	7.7%	6.4%	25.2%	0.0%	38.5%
Inboard/Outboard	0.8%	41.7%	46.7%	18.0%	10.5%	11.3%	0.0%	20.4%
Inboard	3.0%	7.8%	16.5%	37.1%	55.7%	32.2%	2.1%	9.0%
Jet	36.1%	7.0%	6.9%	0.2%	0.2%	18.7%	0.0%	20.9%
All other	**3.5%**	**1.5%**	**1.8%**	**1.9%**	**1.9%**	**3.8%**	**97.8%**	**2.5%**
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Sources: DMV, MARAD

Table A1.3
Boats by Propulsion and Region

Region	Hand	Sail only	Sail w/ Aux	Outboard	I/O	Inboard	Jet	Other	Unknown	Total
1. North Coast	878	1,501	732	16,562	7,147	3,009	3,815	967	32	34,643
2. SF Bay Area	2,766	7,733	6,768	56,487	36,774	20,168	23,106	4,303	118	158,223
3. Central Coast	612	1,771	1,076	12,375	6,531	3,341	3,997	897	17	30,617
4. South Coast	3,693	9,663	9,493	71,407	45,579	23,605	76,519	5,120	301	245,380
5. San Diego	1,043	4,297	3,765	26,073	10,170	6,668	14,586	1,547	82	68,231
6. Northern Interior	242	206	51	5,086	1,185	281	475	277	1	7,804
7. Sacramento Basin	3,276	5,380	2,194	82,410	34,934	10,695	17,050	4,419	132	160,490
8. Central Valley	2,033	3,492	1,163	56,550	25,474	8,520	17,153	3,034	133	117,552
9. Eastern Sierra	124	100	35	1,496	408	213	505	68	2	2,951
10. Southern Interior	1,556	2,109	1,135	27,958	20,210	5,623	36,924	1,667	90	97,272
State Subtotal	**16,222**	**36,204**	**19,738**	**356,403**	**188,412**	**68,153**	**194,132**	**22,297**	**21,602**	**923,163**
11. Out of State	31	141	227	875	424	249	334	68	21	2,370
Total	**16,253**	**36,392**	**26,639**	**357,278**	**188,836**	**82,371**	**194,466**	**22,365**	**933**	**925,533**
1. North Coast	2.5%	4.3%	2.1%	47.8%	20.6%	8.7%	11.0%	2.8%	0.1%	100%
2. SF Bay Area	1.7%	4.9%	4.3%	35.7%	23.2%	12.7%	14.6%	2.7%	0.1%	100%
3. Central Coast	2.0%	5.8%	3.5%	40.4%	21.3%	10.9%	13.1%	2.9%	0.1%	100%
4. South Coast	1.5%	3.9%	3.9%	29.1%	18.6%	9.6%	31.2%	2.1%	0.1%	100%
5. San Diego	1.5%	6.3%	5.5%	38.2%	14.9%	9.8%	21.4%	2.3%	0.1%	100%
6. Northern Interior	3.1%	2.6%	0.7%	65.2%	15.2%	3.6%	6.1%	3.5%	0.0%	100%
7. Sacramento Basin	2.0%	3.4%	1.4%	51.3%	21.8%	6.7%	10.6%	2.8%	0.1%	100%
8. Central Valley	1.7%	3.0%	1.0%	48.1%	21.7%	7.2%	14.6%	2.6%	0.1%	100%
9. Eastern Sierra	4.2%	3.4%	1.2%	50.7%	13.8%	7.2%	17.1%	2.3%	0.1%	100%
10. Southern Interior	1.3%	5.9%	9.6%	36.9%	17.9%	10.5%	14.1%	2.9%	0.9%	100%
State Subtotal	**1.8%**	**3.9%**	**2.1%**	**38.6%**	**20.4%**	**7.4%**	**21.0%**	**2.4%**	**2.3%**	**100%**
11. Out of State	1.3%	5.9%	9.6%	36.9%	17.9%	10.5%	14.1%	2.9%	0.9%	100%
Total	**1.8%**	**3.9%**	**2.9%**	**38.6%**	**20.4%**	**8.9%**	**21.0%**	**2.4%**	**0.1%**	**100%**

Sources: DMV, MARAD

Table A1.4
Boats by License or Documentation Class and Region

Region	Pleasure	Livery	Dealer	Manu.	Comm.	Exempt Youth Group	Exempt Govt	Fish	Rec.	Unknown	Total*
1. North Coast	33,066	133	28	10	432	30	94	507	343	—	34,643
2. SF Bay Area	151,365	345	127	13	664	197	318	473	4,721	—	158,223
3. Central Coast	27,996	110	22	2	403	5	133	414	512	1,020	30,617
4. South Coast	232,139	499	489	113	768	408	353	489	7,663	2,459	245,380
5. San Diego	60,800	286	127	18	147	24	282	175	3,042	3,330	68,231
6. Northern Interior	7,624	106	5	—	14	1	18	5	10	21	7,804
7. Sacramento Basin	146,193	1,211	164	9	206	33	761	83	887	10,943	160,490
8. Central Valley	110,641	563	164	42	143	74	158	53	559	5,155	117,552
10. Eastern Sierra	2,348	114	4	—	4	—	5	—	18	458	97,272
9. Southern Interior	83,530	382	99	18	44	11	93	26	745	12,324	2,951
State Subtotal	**858,235**	**3,755**	**1,231**	**225**	**2,837**	**786**	**2,220**	**2,234**	**18,578**	**33,062**	**923,163**
11. Out of State	2,333	14	9	2	11	2	—	—	—	—	2,370
Total	**862,886**	**3,783**	**1,249**	**228**	**2,858**	**789**	**2,220**	**2,234**	**18,578**	**894,730**	**925,533**
1. North Coast	95.4%	0.4%	0.1%	0.0%	1.2%	0.1%	0.3%	1.5%	1.0%	0.0%	100%
2. SF Bay Area	95.7%	0.2%	0.1%	0.0%	0.4%	0.1%	0.2%	0.3%	3.0%	0.0%	100%
3. Central Coast	91.4%	0.4%	0.1%	0.0%	1.3%	0.0%	0.4%	1.4%	1.7%	3.3%	100%
4. South Coast	94.6%	0.2%	0.2%	0.0%	0.3%	0.2%	0.1%	0.2%	3.1%	1.0%	100%
5. San Diego	89.1%	0.4%	0.2%	0.0%	0.2%	0.0%	0.4%	0.3%	4.5%	4.9%	100%
6. Northern Interior	97.7%	1.4%	0.1%	0.0%	0.2%	0.0%	0.2%	0.1%	0.1%	0.3%	100%
7. Sacramento Basin	91.1%	0.8%	0.1%	0.0%	0.1%	0.0%	0.5%	0.1%	0.6%	6.8%	100%
8. Central Valley	94.1%	0.5%	0.1%	0.0%	0.1%	0.1%	0.1%	0.0%	0.5%	4.4%	100%
9. Eastern Sierra	79.6%	3.9%	0.1%	0.0%	0.1%	0.0%	0.2%	—	0.6%	15.5%	100%
10. Southern Interior	85.9%	0.4%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.8%	12.7%	100%
State Subtotal	**93.0%**	**0.4%**	**0.1%**	**0.0%**	**0.3%**	**0.1%**	**0.2%**	**0.2%**	**2.0%**	**3.6%**	**100%**
11. Out of State	98.5%	0.6%	0.4%	0.1%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	100%
Total	**93.2%**	**0.4%**	**0.1%**	**0.0%**	**0.3%**	**0.1%**	**0.2%**	**0.2%**	**2.0%**	**3.3%**	**100%**

* Totals do not match population total due to cross-registration.
Sources: DMV, MARAD

Table A1.5
Boats by Build Year and Region

Region	1888-1939	1940-49	1950-59	1960-69	1970-79	1980-89	1990-94	1995-99	2000-01	Unknown	Total
1. North Coast	121	185	709	3,399	8,599	8,797	4,358	4,190	2,276	2,009	34,643
2. SF Bay Area	421	434	2,243	12,904	35,234	43,857	21,760	26,106	9,194	6,070	158,223
3. Central Coast	71	114	503	2,886	7,710	7,881	3,524	4,457	1,868	1,603	30,617
4. South Coast	262	295	2,200	14,362	44,374	64,651	44,398	55,796	12,569	6,473	245,380
5. San Diego	93	95	657	4,436	12,977	18,559	10,428	14,073	4,991	1,922	68,231
6. Northern Interior	1	15	227	1,048	2,176	1,792	711	760	753	321	7,804
7. Sacramento Basin	119	209	3,302	15,950	42,080	41,538	18,571	20,716	12,956	5,049	160,490
8. Central Valley	50	132	2,389	11,803	30,566	28,092	13,771	17,036	9,928	3,785	117,552
9. Eastern Sierra	2	—	66	300	702	788	379	370	187	157	2,951
10. Southern Interior	36	58	854	5,349	17,833	24,059	18,399	23,387	5,673	1,624	97,272
State Subtotal	**1,176**	**1,537**	**13,150**	**72,437**	**202,252**	**240,014**	**136,299**	**166,891**	**60,394**	**29,013**	**923,163**
11. Out of State	5	14	40	203	557	627	316	386	115	107	2,370
Total	**1,181**	**1,551**	**13,191**	**72,640**	**202,809**	**240,642**	**136,615**	**167,277**	**60,509**	**29,118**	**925,533**
1. North Coast	0.3%	0.5%	2.0%	9.8%	24.8%	25.4%	12.6%	12.1%	6.6%	5.8%	100%
2. SF Bay Area	0.3%	0.3%	1.4%	8.2%	22.3%	27.7%	13.8%	16.5%	5.8%	3.8%	100%
3. Central Coast	0.2%	0.4%	1.6%	9.4%	25.2%	25.7%	11.5%	14.6%	6.1%	5.2%	100%
4. South Coast	0.1%	0.1%	0.9%	5.9%	18.1%	26.3%	18.1%	22.7%	5.1%	2.6%	100%
5. San Diego	0.1%	0.1%	1.0%	6.5%	19.0%	27.2%	15.3%	20.6%	7.3%	2.8%	100%
6. Northern Interior	0.0%	0.2%	2.9%	13.4%	27.9%	23.0%	9.1%	9.7%	9.6%	4.1%	100%
7. Sacramento Basin	0.1%	0.1%	2.1%	9.9%	26.2%	25.9%	11.6%	12.9%	8.1%	3.1%	100%
8. Central Valley	0.0%	0.1%	2.0%	10.0%	26.0%	23.9%	11.7%	14.5%	8.4%	3.2%	100%
9. Eastern Sierra	0.1%	—	2.2%	10.2%	23.8%	26.7%	12.8%	12.5%	6.3%	5.3%	100%
10. Southern Interior	0.0%	0.1%	0.9%	5.5%	18.3%	24.7%	18.9%	24.0%	5.8%	1.7%	100%
State Subtotal	**0.1%**	**0.2%**	**1.4%**	**7.8%**	**21.9%**	**26.0%**	**14.8%**	**18.1%**	**6.5%**	**3.1%**	**100%**
11. Out of State	0.2%	0.6%	1.7%	8.6%	23.5%	26.5%	13.3%	16.3%	4.9%	4.5%	100%
Total	**0.1%**	**0.2%**	**1.4%**	**7.8%**	**21.9%**	**26.0%**	**14.8%**	**18.1%**	**6.5%**	**3.1%**	**100%**

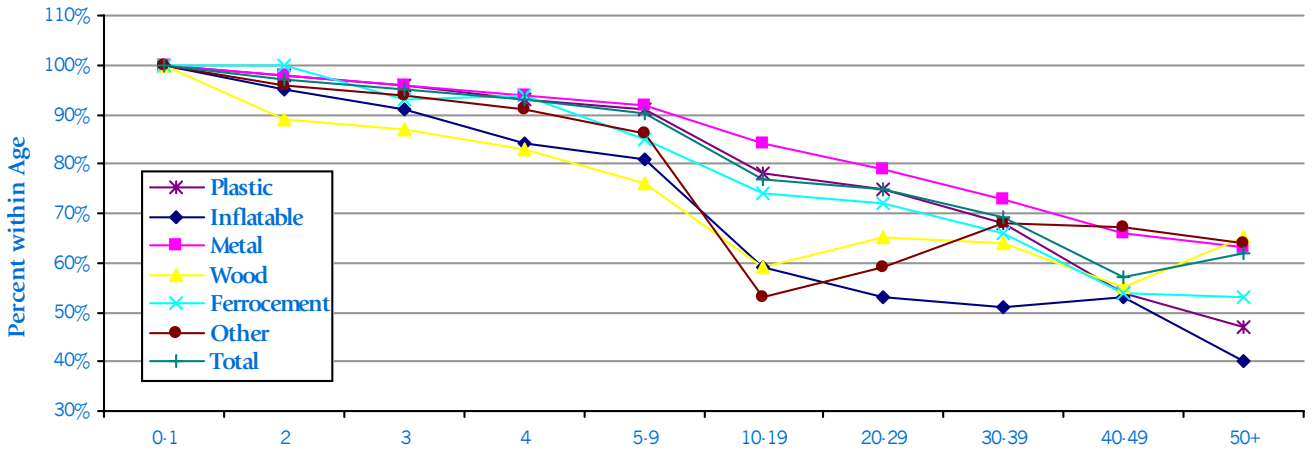
Sources: DMV, MARAD

Table A1.6
Surviving Boats by Age and Material
(available data representing 81.4% of currently registered boats and 82.4% of boats in data base)

Material	Age	0-1	2	3	4	5-9	10-19	20-29	30-39	40-49	50+	Total	% of Current Total
Plastic	Current	34,709	17,793	20,257	29,944	35,173	189,263	146,097	57,515	9,722	296	540,769	71.8%
	% Within Age	99.9%	97.6%	95.8%	93.4%	90.9%	78.4%	74.6%	68.1%	54.1%	46.8%	78.9%	
	Total	34,730	18,231	21,155	32,055	38,699	241,542	195,898	84,409	17,957	632	685,308	
Inflatable	Current	2,317	2,222	1,838	1,671	1,573	16,114	3,767	322	20	17	29,861	4.0%
	% Within Age	100.0%	94.8%	91.4%	84.1%	80.9%	59.0%	53.4%	50.9%	52.6%	40.5%	65.4%	
	Total	2,317	2,345	2,010	1,987	1,945	27,311	7,051	633	38	42	45,679	
Metal	Current	14,451	3,120	2,965	3,078	3,104	42,950	46,260	28,757	4,556	611	149,852	19.9%
	% Within Age	100.0%	98.1%	96.5%	94.4%	92.5%	84.0%	79.2%	73.3%	66.4%	62.7%	81.5%	
	Total	14,457	3,182	3,073	3,259	3,357	51,106	58,436	39,212	6,857	974	183,913	
Wood	Current	5,442	40	53	53	58	981	1,477	4,440	4,162	2,322	19,028	2.5%
	% Within Age	100.0%	88.9%	86.9%	82.8%	76.3%	59.3%	64.6%	64.1%	54.7%	64.9%	68.6%	
	Total	5,443	45	61	64	76	1,654	2,288	6,926	7,615	3,576	27,748	
Ferrocement	Current	59	13	13	15	11	128	173	60	19	8	499	0.1%
	% Within Age	100.0%	100.0%	92.9%	93.8%	84.6%	73.6%	72.1%	65.9%	54.3%	53.3%	74.5%	
	Total	59	13	14	16	13	174	240	91	35	15	670	
Other	Current	1,268	267	254	476	639	5,431	2,408	2,470	253	44	13,510	1.8%
	% Within Age	99.9%	96.0%	94.1%	90.8%	86.5%	53.2%	58.6%	67.7%	67.1%	63.8%	62.9%	
	Total	1,269	278	270	524	739	10,212	4,110	3,647	377	69	21,495	
Unknown	Current	9	0	0	0	0	2	13	57	1	2	84	0.0%
	% Within Age	100.0%					100.0%	76.5%	83.8%	100.0%	100.0%	84.8%	
	Total	9	0	0	0	0	2	17	68	1	2	99	
Total	**Current**	**58,255**	**23,455**	**25,380**	**35,237**	**40,558**	**254,869**	**200,195**	**93,621**	**18,733**	**3,300**	**753,603**	**100.0%**
	% Within Age	**100.0%**	**97.3%**	**95.5%**	**93.0%**	**90.5%**	**76.8%**	**74.7%**	**69.4%**	**57.0%**	**62.1%**	**78.1%**	
	Total	**58,284**	**24,094**	**26,583**	**37,905**	**44,829**	**332,001**	**268,040**	**134,986**	**32,880**	**5,310**	**964,912**	

The most common boat hull material in California is plastic (71.8% of currently registered boats), followed by metal (19.9%), inflatable fabric (4.0%) and wood (2.5%).
The percentages of boats of any age still registered, as shown in this table and the following chart, show that metal boats are the most durable, followed by plastic, wood and inflatables.

Exhibit A1.1
Boat Survival Rates by Material and Age of Boat



Appendix A2
Detailed Tables of Boater Survey Responses

Table A2.1
Comparison of Household Income – 2000 Census and 2001 Boater Survey

Household Income	2000 Census		2001 Boater Survey	
	Number	Percent	Number*	Percent
Less than $25,000	3,044,883	26.7%	201	6.6%
$25,001 - $50,000	2,987,790	26.2%	730	24.0%
$50,001 - $100,000	3,402,746	29.9%	1,359	44.6%
$100,001 - $200,000	1,585,184	13.9%	593	19.5%
Over $200,000	364,553	3.2%	163	5.3%
Subtotal Valid			**3,046**	**100%**
Missing data			1,073	
Total Households	**11,385,156**	**100%**	**4,119**	

* Weighted to reflect sample distribution by region and boat length
Source: 2001 PRI California Boat Owner Survey

Table A2.2
Owner's Age and Household Income by Type of Boat

	Boat Length						Total
	<16', Jet	<16', Other	16' - 19'11"	20' - 25'11"	26' - 39'11"	40' +	
Mean age (N=3,985)	42.7	57.3	52.8	53.1	57.9	60.0	53.9
Household Income (N=3,043)							
Under $25,000	1.0%	10.9%	6.5%	1.7%	3.6%	4.0%	6.6%
$25,000 - $50,000	19.8%	27.9%	25.2%	18.8%	17.8%	4.0%	24.0%
$50,000 - $100,000	50.7%	42.8%	44.9%	48.6%	37.1%	32.0%	44.6%
$100,000 - $200,000	19.1%	14.5%	19.3%	25.5%	32.0%	32.0%	19.5%
Over $200,000	9.4%	3.9%	4.2%	5.4%	9.6%	28.0%	5.3%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: 2001 PRI California Boat Owner Survey

Table A2.3
Storage of Registered and Documented Boats
Distribution by Length Class, Region, and Facility Type at Primary Site (N=3,862)

Length Class		Region										Total
		NC	SF	CC	SC	SD	NI	SB	CV	ES	SI	
<26'	Boat storage	6.3%	12.7%	9.0%	10.8%	12.4%	2.9%	5.7%	6.5%	10.0%	4.6%	8.9%
	General storage	4.2%	6.6%	4.9%	8.5%	8.4%	2.9%	2.3%	2.9%	—	4.8%	5.6%
	Own property	81.8%	75.7%	78.7%	73.7%	72.3%	91.2%	87.7%	87.9%	80.0%	84.3%	79.9%
	Other	—	—	—	0.7%	—	—	—	0.7%	—	—	0.3%
	Club	—	—	0.8%	—	0.8%	—	—	—	—	—	0.1%
	Other private property	7.7%	4.1%	5.7%	6.3%	4.8%	2.9%	4.4%	1.6%	10.0%	4.6%	4.7%
	Other public property	—	0.5%	0.8%	—	—	—	—	—	—	1.1%	0.2%
	Private mooring	—	0.5%	—	—	1.2%	—	—	0.4%	—	0.6%	0.3%
		100%	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
26'+	Boat storage	85.7%	84.0%	88.9%	79.8%	87.1%	—	76.0%	64.7%	—	70.0%	80.6%
	General storage	—	1.3%	—	3.0%	—	—	4.0%	—	—		1.8%
	Own property	14.3%	6.7%	11.1%	9.1%	6.5%	—	16.0%	29.4%	—	30.0%	11.0%
	Club	—	—	—	1.0%	—	—	—	—	—	—	0.4%
	Other private property	—	4.0%	—	1.0%	6.5%	—	—	—	—	—	2.2%
	Other public property	—	4.0%	—	3.0%	—	—	4.0%	5.9%	—	—	2.9%
	Other	—	—	—	1.0%	—	—	—	—	—	—	0.4%
	Other vessel	—	—	—	1.0%	—	—	—	—	—	—	0.4%
	Private mooring	—	—	—	1.0%	—	—	—	—	—	—	0.4%
		100%	**100%**	**100%**	**100%**	**100%**	**—**	**100%**	**100%**	**—**	**100%**	**100%**

Source: 2001 PRI California Boat Owner Survey

Table A2.4
Boaters Dissatisfied with Storage by Length Class and Reason

Length Class	Why Disliked	Percent of Respondents
<26' (N=230)	Not covered	21.8%
	Unspecified or unclear	19.9%
	Want a garage or shed	12.3%
	Takes too much room	10.6%
	Want to store at home	10.5%
	Too far from home	5.2%
	Want marina slip	4.5%
	No affordable alternative	4.1%
	No other place available	3.3%
	Too far from water	2.6%
	Dislike neighborhood	1.3%
	Not enough parking	1.3%
	Security problems	1.0%
	Too expensive	0.9%
26'+ (N=46)	Too far from home	23.0%
	Unspecified or unclear	22.5%
	Not covered	14.2%
	Want a garage or shed	6.7%
	Want marina slip	6.2%
	Want to store at home	5.4%
	No affordable alternative	5.3%

Source: 2001 PRI California Boat Owner Survey

Table A2.5
Mean Daily Trip Spending, by Type of Boat

Type	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
Grocery & convenience	$46.83	$24.52	$26.66	$28.98	$30.7	$45.59	$29.52
Restaurants	12.39	6.11	8.92	6.95	12.30	19.41	8.56
Hotels & motels	24.16	5.59	9.27	6.58	2.93	2.18	9.10
Campgrounds	10.25	6.68	5.86	5.03	1.38	0.78	6.14
Gift, book, other retail	3.39	1.97	3.19	3.31	3.63	5.02	2.92
Drug stores	3.39	1.59	1.38	1.23	1.05	1.35	1.65
Boating equipment stores	13.27	9.76	11.65	15.47	17.33	19.30	12.43
Gas stations, boat fuel	46.83	11.86	27.70	41.16	26.93	30.86	27.60
Gas stations, vehicle fuel	36.33	19.32	24.91	21.39	8.03	8.48	22.69
Marinas, transient berthing	1.70	4.69	3.03	6.71	12.91	14.45	4.84
Marinas, parking	1.61	1.24	1.53	1.83	0.57	0.40	1.42
Marinas, launching	1.83	3.03	3.39	3.73	0.76	0.17	2.89
Marinas, boat fuel	8.86	3.62	14.36	15.27	22.24	33.13	11.31
Marinas, boat/motor rental	0.76	0.16	0.22	1.98	0.42	—	0.58
Marinas, gear rental	0.34	0.09	1.44	0.55	0.40	0.43	0.65
Marinas, incidentals	5.11	2.24	2.99	4.11	3.46	5.66	3.29
Total	$206.74	$94.44	$135.74	$160.82	$137.14	$183.34	$138.36
N	**302**	**637**	**673**	**375**	**152**	**19**	**2,159**

Source: 2001 PRI California Boat Owner Survey

Table A2.6
Annual Ownership and Other Non-Trip Costs, by Type of Boat, Mean Annual Expenditures, Calendar 2000

Type	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
Equipment purchases	$397.65	$168.79	$342.43	$923.14	$1,491.89	$3,582.48	$469.79
Repairs & maintenance	255.70	132.90	261.85	645.61	1,599.53	3,046.97	376.60
Insurance	121.33	64.19	159.22	245.50	410.84	1,137.34	160.14
Property tax on boat	26.03	26.50	54.42	111.38	227.23	831.13	67.44
Marina slip	28.66	103.00	35.30	352.47	2,340.15	3,584.29	279.68
Dry storage	39.85	21.08	68.64	135.20	74.35	185.45	59.42
Other marina fees	—	4.82	10.64	7.60	48.77	130.33	10.42
Club and association fees	4.57	62.22	36.48	28.50	114.08	77.31	46.21
Other costs	56.68	26.35	21.33	55.95	91.19	308.05	38.85
Total	$915.83	$687.33	$1,154.56	$2,390.23	$6,135.89	$13,118.45	$1,697.31
N	281	695	759	383	176	25	2,320

Source: 2001 PRI California Boat Owner Survey

Table A2.7
Reason 1 to Use Waterway 1 (N=2,788)

(Percent within type)

Reason	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
Close to home	30.2%	23.5%	30.1%	33.3%	24.3%	21.4%	28.0%
Good fishing	1.5%	39.9%	25.8%	14.7%	10.1%	7.1%	24.0%
Convenience	5.6%	8.2%	7.3%	6.6%	12.8%	10.7%	7.7%
Likes the place	10.0%	3.6%	4.7%	6.8%	6.4%	—	5.4%
Pleasure	4.1%	3.0%	2.0%	3.5%	5.5%	10.7%	3.2%
Large water area	3.8%	0.7%	3.1%	5.0%	2.8%	3.6%	2.7%
Near vacation home or camp	4.4%	1.2%	4.4%	1.8%	1.4%	—	2.7%
Good facilities	—	3.0%	1.6%	3.9%	0.5%	—	2.1%
Clean water	1.5%	0.7%	3.3%	2.0%	0.5%	—	1.8%
Good camping	5.3%	2.1%	1.0%	0.4%	—	—	1.7%
Boat storage facility	—	0.7%	2.2%	0.9%	6.0%	17.9%	1.7%
Water skiing	2.6%	0.1%	2.3%	2.2%	—	—	1.4%
Good sailing	—	0.8%	0.3%	1.3%	9.2%	3.6%	1.3%
Scenery, natural beauty	0.9%	0.3%	1.0%	3.3%	2.8%	—	1.3%
Warm water	5.0%	0.2%	0.8%	—	0.9%	—	1.0%
Not crowded	2.6%	0.5%	0.1%	2.0%	0.5%	—	0.9%
Boating destinations	—	0.8%	0.5%	1.5%	2.8%	3.6%	0.9%

Source: 2001 PRI California Boat Owner Survey

Table A2.8
Reason 2 to Use Waterway 1 (N=1,576)

(Percent within type)

Reason	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
Good fishing	—	29.3%	20.7%	12.2%	11.6%	6.3%	18.3%
Close to home	2.3%	13.8%	8.6%	9.5%	8.0%	6.3%	9.5%
Pleasure	2.3%	6.3%	7.5%	5.7%	9.8%	12.5%	6.3%
Convenience	6.3%	4.7%	4.8%	7.2%	6.3%	6.3%	5.5%
Likes the place	2.3%	4.3%	10.1%	2.3%	4.5%	—	5.3%
Scenery, natural beauty	7.7%	5.5%	3.7%	3.8%	6.3%	6.3%	5.1%
Not crowded	11.3%	3.5%	3.7%	7.2%	0.9%	—	5.1%
Water skiing	3.2%	1.4%	9.3%	1.5%	1.8%	—	3.9%
Large water area	5.0%	3.9%	1.8%	5.3%	2.7%	18.8%	3.7%
Good facilities	4.1%	1.2%	3.7%	4.9%	1.8%	6.3%	3.0%
Good weather	6.8%	—	2.2%	4.9%	1.8%	6.3%	2.6%
No fees	0.9%	5.5%	1.3%	0.8%	—	—	2.4%
Good camping	3.2%	1.8%	3.7%	1.1%	0.9%	—	2.3%
Good sailing	—	2.8%	2.0%	0.4%	9.8%	—	2.2%
Clean water	6.8%	0.2%	2.2%	1.5%	1.8%	—	2.0%
Near vacation home or camp	8.1%	0.2%	1.1%	1.9%	0.9%	—	1.9%
Cruising	—	2.6%	0.9%	2.3%	3.6%	—	1.7%
Warm water	3.2%	1.0%	2.6%	—	—	—	1.5%
Seclusion	—	3.1%	0.4%	1.1%	—	—	1.3%
No restrictions	7.7%	—	—	—	—	—	1.1%
Less expensive	—	0.6%	0.2%	4.2%	—	—	1.0%

Source: 2001 PRI California Boat Owner Survey

Table A2.9
Reason 1 to Use Waterway 2 (N=1,328)

(Percent within type)

Reason	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	Total
Good fishing	—	44.6%	26.6%	15.0%	14.5%	—	27.1%
Close to home	31.9%	16.5%	19.9%	33.7%	19.4%	—	22.1%
Convenience	10.4%	5.9%	4.7%	4.1%	4.8%	—	5.7%
Likes the place	2.5%	4.6%	6.5%	2.1%	8.1%	14.3%	4.8%
Not crowded	13.5%	0.7%	5.8%	1.0%	—	—	4.0%
Pleasure	6.7%	2.6%	2.0%	1.6%	9.7%	—	3.1%
Water skiing	2.5%	0.7%	3.3%	8.3%	1.6%	—	2.9%
Large water area	3.7%	1.5%	2.9%	3.1%	4.8%	—	2.6%
Good camping	2.5%	0.9%	3.6%	5.7%	—	—	2.6%
Scenery, natural beauty	—	3.5%	0.7%	3.6%	3.2%	28.6%	2.3%
Good sailing	0.6%	4.2%	0.4%	1.0%	6.5%	—	2.1%

Source: 2001 PRI California Boat Owner Survey

Table A2.10
Reason 2 to Use Waterway 2 (N=699)

(Percent within type)

Reason	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
Good fishing	6.4%	29.2%	14.5%	4.0%	11.1%	—	16.5%
Good facilities	2.1%	6.2%	6.0%	14.0%	3.7%	—	6.6%
Water skiing	—	0.4%	15.3%	3.0%	3.7%	—	6.2%
Close to home	11.7%	6.6%	4.0%	4.0%	7.4%	—	6.0%
Not crowded	9.6%	2.2%	9.2%	4.0%	—	—	5.9%
Good camping	10.6%	6.6%	2.8%	7.0%	—	—	5.6%
No fees	—	12.8%	2.0%	3.0%	—	—	5.3%
Pleasure	—	6.2%	6.0%	4.0%	7.4%	33.3%	5.2%
Scenery, natural beauty	10.6%	1.8%	3.2%	10.0%	7.4%	—	4.9%
Clean water	6.4%	1.8%	4.0%	4.0%	7.4%	—	3.7%
Convenience	—	4.4%	4.4%	2.0%	11.1%	—	3.7%
Large water area	4.3%	0.9%	4.8%	6.0%	—	—	3.4%
Likes the place	—	1.8%	4.0%	4.0%	11.1%	—	3.0%
Good company	13.8%	—	2.4%	—	—	—	2.7%
None	—	3.1%	2.4%	2.0%	3.7%	—	2.3%
Warm water	2.1%	—	1.6%	8.0%	—	—	2.0%
Good sailing	—	3.5%	0.8%	—	7.4%	—	1.7%
Safe	12.8%	—	—	—	—	—	1.7%

Source: 2001 PRI California Boat Owner Survey

Table A2.11
Problem 2 at Waterway 1 (N=257)

(Percent within type)

Problem	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
Insufficient water depth	25.0%	9.7%	17.0%	28.6%	18.2%	—	18.7%
Excessive/rude law enforcement	32.7%	—	10.2%	4.8%	—	—	10.9%
Reckless PWC operators	—	8.1%	11.4%	4.8%	9.1%	50.0%	7.4%
Overcrowding	11.5%	6.5%	1.1%	4.8%	—	—	5.1%
Congestion at launch ramps	—	—	8.0%	9.5%	—	—	4.3%
High facility use fee	—	14.5%	2.3%	—	—	—	4.3%
Invasive species	—	—	5.7%	7.1%	9.1%	—	3.5%
Drunkenness	—	9.7%	—	4.8%	9.1%	—	3.5%
Poor ramp condition	—	—	9.1%	—	9.1%	—	3.5%
Floating debris	—	3.2%	4.5%	4.8%	—	—	3.1%
Reckless boaters	3.8%	—	6.8%	—	—	—	3.1%
Need parking	—	—	9.1%	—	—	—	3.1%

Source: 2001 PRI California Boat Owner Survey

Table A2.12
Problem 1 at Waterway 2 (N=322)

(Percent within type)

Problem 1	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
Overcrowding	33.3%	19.8%	9.9%	10.5%	11.1%	—	17.1%
Insufficient water depth	—	10.4%	16.5%	10.5%	—	—	10.6%
Poor water quality	14.0%	—	1.7%	15.8%	—	—	5.0%
Reckless PWC operators	3.5%	1.0%	7.4%	5.3%	11.1%	—	4.7%
Congestion at launch ramps	3.5%	2.1%	6.6%	5.3%	—	—	4.3%

Problem 2 at Waterway 2 (N=125)

(Percent within type)

Problem 2	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
Overcrowding	26.7%	5.7%	—	22.7%	—	—	12.0%
Need reservations	43.3%	—	—	—	—	—	10.4%
Congestion at launch ramps	—	22.9%	5.6%	—	—	—	8.0%
Insufficient water depth	—	—	19.4%	4.5%	—	—	6.4%
Need parking	—	14.3%	8.3%	—	—	—	6.4%

Source: 2001 PRI California Boat Owner Survey

Table A2.13
Facility Needs at Waterway 2 (N=531)

(Percent within type)

Facility Needs	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
Launching capacity	23.4%	18.8%	23.8%	13.0%	5.3%	—	20.2%
Better restrooms	10.9%	9.7%	3.9%	5.6%	—	—	6.8%
Maintain water level	—	4.3%	9.7%	7.4%	—	—	6.0%
Campgrounds	20.3%	2.7%	5.8%	—	—	—	5.6%
More public access	3.1%	11.8%	1.5%	—	—	—	5.1%
More docks	—	8.6%	2.9%	3.7%	5.3%	—	4.7%
Better facilities	3.1%	4.8%	5.8%	—	—	—	4.3%
More capacity	—	—	5.8%	16.7%	—	—	4.0%
Ramp repairs	—	0.5%	6.8%	7.4%	—	—	3.6%
More marinas	3.1%	1.1%	2.9%	—	15.8%	50.0%	2.6%
Reservation system	3.1%	—	5.8%	—	—	—	2.6%
Parking capacity	—	2.2%	3.9%	1.9%	—	—	2.4%
Dock repairs	—	3.2%	—	5.6%	5.3%	—	1.9%

Source: 2001 PRI California Boat Owner Survey

Table A2.14
Most-Used Waterways by Boat Type and Region

(Percent of total N)

This table provides a cross tabulation of most-used waterways by region and boat length.

a) North Coast	*(N=139)*	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
None stated		1.4%	24.5%	11.5%	1.4%	1.4%	—	40.3%
Lake Sonoma		0.7%	2.9%	4.3%	1.4%	—	—	9.4%
Pacific Ocean		—	2.2%	1.4%	2.2%	0.7%	0.7%	7.2%
Humboldt Bay		—	2.9%	1.4%	—	—	—	4.3%
Lake Mendocino		0.7%	1.4%	2.2%	—	—	—	4.3%
Ruth Lake Reservoir		—	2.2%	2.2%	—	—	—	4.3%
Bodega Bay		—	0.7%	1.4%	1.4%	—	—	3.6%
Lake Berryessa		—	0.7%	1.4%	1.4%	—	—	3.6%
Clear Lake		—	0.7%	1.4%	0.7%	—	—	2.9%
San Francisco Bay		—	0.7%	0.7%		0.7%	—	2.2%
Tomales Bay		—	1.4%	—	0.7%	—	—	2.2%
Trinidad Harbor		—	0.7%	0.7%	0.7%	—	—	2.2%
Trinity Lake		—	0.7%	0.7%	0.7%	—	—	2.2%
Klamath River		—	1.4%	—	—	—	—	1.4%
Lake Pillsbury		—	0.7%	0.7%	—	—	—	1.4%
Petaluma River		—	1.4%	—	—	—	—	1.4%
Blue Lake		—	0.7%	—	—	—	—	0.7%
Eagle Lake		—	—	0.7%	—	—	—	0.7%
Eel River		—	0.7%	—	—	—	—	0.7%
Falls Creek		—	0.7%	—	—	—	—	0.7%
Gold Lake		—	0.7%	—	—	—	—	0.7%
Humboldt Lagoons		—	0.7%	—	—	—	—	0.7%
Lake Shasta		—	—	0.7%	—	—	—	0.7%
Napa River		—	0.7%	—	—	—	—	0.7%
Noyo River		—	—	—	0.7%	—	—	0.7%
Unknown		—	0.7%	—	—	—	—	0.7%
Total		2.9%	50.4%	31.7%	11.5%	2.9%	0.7%	100%

b) San Francisco Bay	*(N=715)*	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
None stated		—	15.5%	11.0%	2.1%	1.3%	0.1%	30.1%
San Francisco Bay		1.0%	2.4%	1.7%	1.4%	4.3%	0.3%	11.0%
Sac-San Joaquin Delta		0.3%	2.1%	4.9%	1.4%	1.4%	0.4%	10.5%
Lake Berryessa		1.4%	0.7%	2.4%	0.7%	0.1%	—	5.3%
Clear Lake		2.1%	0.3%	2.4%		—	—	4.8%
Sacramento River		—	1.4%	2.1%	0.7%	0.3%	—	4.5%
Lake Tahoe		—	0.7%	1.0%	1.0%	—	—	2.7%
San Pablo Bay		—	2.1%	—	—	0.1%	—	2.2%
San Joaquin River		—	0.3%	0.7%	—	0.8%	0.3%	2.1%
Pacific Ocean		—	0.7%	0.3%	0.7%	0.1%	—	1.8%

Source: 2001 PRI California Boat Owner Survey

Table A2.14 ***(continued)***

b) San Francisco Bay (cont.)	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
Napa River	—	1.0%	0.7%	—	—	—	1.7%
Anderson Lake	—	0.3%	1.0%	0.3%	—	—	1.5%
Monterey Bay	—	—	0.7%	0.7%	—	—	1.4%
Lake Don Pedro	—	—	0.7%	0.3%	—	0.1%	1.1%
Coyote Lake (Reservoir)	—	0.7%	0.3%	—	—	—	1.0%
Lake Camanche	—	—	1.0%	—	—	—	1.0%
Lake Shasta	0.3%	—	—	0.7%	—	—	1.0%
Carquinez Strait	—	0.7%	—	—	0.1%	—	0.8%
Lake McClure	—	0.3%	0.3%	0.3%	—	—	0.8%
Brannan Island	—	—	0.7%	—	—	—	0.7%
Lake Davis	—	0.7%	—	—	—	—	0.7%
Lake Sonoma	—	—	0.7%	—	—	—	0.7%
Oakland Estuary	—	—	—	0.7%	—	—	0.7%
Bodega Bay	—	—	0.3%	0.3%	—	—	0.6%
Donner Lake	0.3%	0.3%	—	—	—	—	0.6%
Half Moon Bay	0.3%	—	0.3%	—	—	—	0.6%
Lake Almanor	0.3%	0.3%	—	—	—	—	0.6%
Lake Pillsbury	—	—	0.3%	0.3%	—	—	0.6%
New Hogan Reservoir	—	—	0.3%	0.3%	—	—	0.6%
Tomales Bay	—	—	0.3%	—	0.1%	—	0.4%
Bear Valley Reservoir	—	0.3%	—	—	—	—	0.3%
Blue Lake	—	0.3%	—	—	—	—	0.3%
Bucks Lake	—	0.3%	—	—	—	—	0.3%
Calero Reservoir	0.3%	—	—	—	—	—	0.3%
Calero Resrvoir	0.3%	—	—	—	—	—	0.3%
Corning	—	—	0.3%	—	—	—	0.3%
Corte Madera Creek	—	0.3%	—	—	—	—	0.3%
Del Valle Reservoir	—	0.3%	—	—	—	—	0.3%
Discovery Park	—	—	0.3%	—	—	—	0.3%
Fall River Lake	—	0.3%	—	—	—	—	0.3%
Folsom Lake	—	—	0.3%		—	—	0.3%
Hogsback Lake	—	—	—	0.3%	—	—	0.3%
Honker Bay	—	—	—	0.3%	—	—	0.3%
Lake Amador	—	0.3%	—	—	—	—	0.3%
Lake Hennessey	—	0.3%	—	—	—	—	0.3%
Lake Oroville	—	—	—	0.3%	—	—	0.3%
Lake Wildwood	—	—	0.3%	—	—	—	0.3%
Modesto Reservoir	0.3%	—	—	—	—	—	0.3%
New Melones Reservoir	0.3%	—	—	—	—	—	0.3%
Pittsburg	—	—	—	0.3%	—	—	0.3%
Rio Vista	—	—	0.3%	—	—	—	0.3%
Rollins Lake (Reservoir)	—	—	0.3%	—	—	—	0.3%
Salmon Lake	—	0.3%	—	—	—	—	0.3%
San Luis Reservoir	—	0.3%	—	—	—	—	0.3%
San Pablo Reservoir	—	0.3%	—	—	—	—	0.3%
Spicers Reservoir	—	0.3%	—	—	—	—	0.3%
Suisun Marsh	—	0.3%	—	—	—	—	0.3%
Woodward Reservoir	0.3%	—	—	—	—	—	0.3%
Petaluma River	—	—	—	—	0.1%	—	0.1%
Suisun Bay	—	—	—	—	0.1%	—	0.1%
Total	**7.3%**	**34.0%**	**35.5%**	**12.9%**	**9.1%**	**1.3%**	**100%**

Source: 2001 PRI California Boat Owner Survey

Table A2.14 ***(continued)***

c) Central Coast *(N=121)*	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
None Stated	0.8%	15.7%	14.0%	5.0%	1.7%	—	37.2%
Lake Nacimiento	1.7%	2.5%	5.8%	4.1%	—	—	14.0%
Monterey Bay	—	0.8%	4.1%	4.1%	3.3%	—	12.4%
Lake San Antonio	0.8%	1.7%	3.3%	0.8%	—	—	6.6%
Pacific Ocean	—	1.7%	1.7%	2.5%	0.8%	—	6.6%
Lopez Lake	0.8%	0.8%	2.5%	—	—	—	4.1%
Morro Bay	—	1.7%	—	1.7%	—	—	3.3%
Santa Margarita Lake	—	1.7%	0.8%	—	—	—	2.5%
Loch Lomond Reservoir	—	1.7%	—	—	—	—	1.7%
San Luis Reservoir	0.8%	0.8%	—	—	—	—	1.7%
Anderson Lake	—	—	0.8%	—	—	—	0.8%
Clear Lake	—	—	0.8%	—	—	—	0.8%
Elkhorn Slough	—	0.8%	—	—	—	—	0.8%
Huntington Lake	—	0.8%	—	—	—	—	0.8%
Lake Almanor	—	—	—	0.8%	—	—	0.8%
Lake Tahoe	—	—	—	0.8%	—	—	0.8%
Lexington Reservoir	—	0.8%	—		—	—	0.8%
Moss Landing	—	—	—	0.8%	—	—	0.8%
Sacramento River	—	0.8%	—	—	—	—	0.8%
San Francisco Bay	—	—	—	—	0.8%	—	0.8%
San Joaquin River	—	0.8%	—	—	—	—	0.8%
Webber Lake	—	0.8%	—	—	—	—	0.8%
Total	**5.0%**	**33.9%**	**33.9%**	**20.7%**	**6.6%**		**100%**

Source: 2001 PRI California Boat Owner Survey

Table A2.14 ***(continued)***

d) South Coast *(N=1,181)*	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
None stated	6.0%	11.4%	10.4%	2.5%	1.1%	0.2%	31.6%
Pacific Ocean	—	1.5%	1.5%	1.5%	2.1%	0.3%	7.0%
Colorado River	3.0%	0.5%	1.5%	0.5%	—	—	5.5%
Big Bear Lake	—	3.5%	0.5%	—	—	—	4.0%
Lake Mohave	1.5%	—	1.5%	0.5%	0.2%	—	3.7%
Castaic Lake	1.0%	0.5%	1.0%	1.0%		—	3.6%
Channel Islands Harbor	—	1.0%	0.5%	1.0%	0.6%	—	3.1%
Lake Arrowhead	0.5%	—	2.0%	—	—	—	2.5%
Lake Cachuma	—	1.5%	—	0.5%	—	—	2.0%
Huntington Lake	—	1.0%	1.0%	—	—	—	2.0%
Marina Del Rey	—	1.0%	—	0.5%	0.3%	—	1.8%
Mission Bay	—	—	1.5%	—	0.2%	—	1.7%
Newport Harbor	—	0.5%	0.5%	—	0.5%	0.1%	1.6%
L.A.-Long Beach Harbor	—	1.0%	—	—	0.5%	0.1%	1.6%
Unknown	—	1.0%	—	—	0.5%	—	1.5%
Lake Piru	—	1.0%	0.5%	—	—	—	1.5%
Lake Perris	—	1.0%	0.5%	—	—	—	1.5%
Lake Casitas	—	1.5%	—	—	—	—	1.5%
Dana Harbor	—	0.5%	0.5%	0.5%	—	—	1.5%
Santa Barbara Channel	—	—	0.5%	—	0.7%	0.2%	1.4%
San Pedro Bay	—	—	—	1.0%	0.1%	0.2%	1.3%
Catalina Island	—	1.0%	—	—	0.1%	—	1.1%
Alamitos Bay	—	1.0%	—	—	0.1%	—	1.1%
Pyramid Lake	—	1.0%	—	—	—	—	1.0%
Lake San Antonio	—	—	1.0%	—	—	—	1.0%
Lake Nacimiento	1.0%	—	—	—	—	—	1.0%
King Harbor	0.5%	0.5%	—	—	—	—	1.0%
Blythe (Colorado River)	—	—	1.0%	—	—	—	1.0%
Bass Lake	0.5%	—	—	0.5%	—	—	1.0%
Avalon Harbor	0.5%	—	0.5%	—	—	—	1.0%
Catalina Channel	—	0.5%	—	—	0.3%	0.1%	0.8%
Santa Monica Bay	—	—	—	—	0.7%	—	0.7%
Lake Isabella	—	—	—	0.5%	0.1%	—	0.6%
Lake Havasu	—	—	0.5%	—	0.1%	—	0.6%
Huntington Harbor	0.5%	—	—	—	0.1%	—	0.6%
Ventura Harbor	—	—	—	0.5%	—	—	0.5%
Pine Flat Lake	—	0.5%	—	—	—	—	0.5%
Palmdale Lake	0.5%		—	—	—	—	0.5%
Lopez Lake	—	0.5%	—	—	—	—	0.5%
Lake Mead	0.5%	—	—	—	—	—	0.5%
Lake Elsinore	0.5%	—	—	—	—	—	0.5%
Lake Almanor	—	0.5%	—	—	—	—	0.5%
June Lake	—	0.5%	—	—	—	—	0.5%
Convict Lake	—	—	0.5%	—	—	—	0.5%
Anaheim Bay	—	0.5%	—	—	—	—	0.5%
Southern California Bight	—	—	—	—	—	0.1%	0.1%
San Francisco Bay	—	—	—	—	0.1%	—	0.1%
Sac-San Joaquin Delta	—	—	—	—	—	0.1%	0.1%
Total	**16.6%**	**35.2%**	**27.7%**	**11.1%**	**8.1%**	**1.3%**	**100%**

Source: 2001 PRI California Boat Owner Survey

Table A2.14 *(continued)*

e) San Diego (N=279)	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
None stated	1.1%	19.0%	10.0%	4.3%	1.8%	0.4%	36.6%
San Diego Bay	1.1%	3.6%	3.2%	9.0%	4.7%	—	21.5%
Mission Bay	1.4%	3.6%	4.7%	2.2%	0.7%	—	12.5%
Colorado River	3.2%	1.4%	3.2%	0.4%		—	8.2%
Pacific Ocean	—	1.4%	0.4%	1.4%	2.5%	—	5.7%
Lake San Vicente	—	1.4%	2.5%	0.4%		—	4.3%
Oceanside Harbor	0.4%	1.4%	0.4%	1.1%	0.4%	—	3.6%
Lake Powell	1.4%	—	—	—	—	—	1.4%
El Capitan Lake	1.1%	—	—	—	—	—	1.1%
Otay Lake	—	1.1%	—	—	—	—	1.1%
June Lake	—	0.4%	—	—	—	—	0.4%
Lake Almanor	—	0.4%	—	—	—	—	0.4%
Lake Hodges	—	0.4%	—	—	—	—	0.4%
Lake Miramar	—	0.4%	—	—	—	—	0.4%
Lake Mohave	0.4%		—	—	—	—	0.4%
Lake Poway	—	0.4%	—	—	—	—	0.4%
Lake Powell, NV	—	—	0.4%	—	—	—	0.4%
Lake Shasta	0.4%	—	—	—	—	—	0.4%
San Francisco Bay	—	—	—	0.4%	—	—	0.4%
Sutherland Reservoir	—	—	0.4%	—	—	—	0.4%
Unknown	—	—	0.4%	—	—	—	0.4%
Total	**10.4%**	**34.8%**	**25.4%**	**19.0%**	**10.0%**	**0.4%**	**100%**

f) Northern Interior (N=26)	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
None stated	—	26.9%	11.5%	3.8%	—	—	42.3%
Eagle Lake	—	11.5%	3.8%	—	—	—	15.4%
Lake Shasta	—	3.8%	7.7%	—	—	—	11.5%
Lake Almanor	—	3.8%	3.8%	—	—	—	7.7%
Antelope Lake	—	3.8%	—	—	—	—	3.8%
Iron Gate Reservoir	—	3.8%	—	—	—	—	3.8%
Lake McCloud	—	3.8%	—	—	—	—	3.8%
Lake Shastina	—	3.8%	—	—	—	—	3.8%
Lake Siskiyou	—	3.8%	—	—	—	—	3.8%
Unknown	—	3.8%	—	—	—	—	3.8%
Total	**—**	**69.2%**	**26.9%**	**3.8%**	**—**	**—**	**100%**

Source: 2001 PRI California Boat Owner Survey

Table A2.14 *(continued)*

g) Sacramento Basin *(N=672)*	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
None stated	0.6%	23.8%	8.6%	2.4%	0.6%	—	36.0%
Sacramento River	0.3%	3.9%	3.3%	1.2%	0.6%	—	9.2%
Folsom Lake	0.9%	2.4%	2.7%	1.8%	0.1%	—	7.9%
Lake Oroville	—	2.4%	2.7%	1.5%	0.4%	0.1%	7.1%
Shasta Lake	—	1.5%	1.8%	1.8%	0.3%	0.1%	5.5%
Clear Lake	0.3%	0.3%	3.3%	0.6%	—	—	4.5%
Lake Tahoe	—	—	0.9%	1.8%	0.1%	—	2.8%
Sac-San Joaquin Delta	—	1.2%	0.3%	0.3%	0.1%	—	1.9%
Black Butte Reservoir	—	0.9%	0.6%	—	—	—	1.5%
Pacific Ocean	—	0.6%	0.3%	0.6%	—	—	1.5%
Rollins Lake (Reservoir)	—	0.6%	0.9%	—	—	—	1.5%
Bullards Bar Reservoir	—	—	0.9%	0.3%	—	—	1.2%
Jenkinson Lake	—	0.6%	0.6%	—	—	—	1.2%
Lake Almanor	—	—	0.9%	0.3%	—	—	1.2%
Lake Camanche	0.3%	—	0.9%	—	—	—	1.2%
Whiskeytown Lake	—	0.6%	0.6%	—	—	—	1.2%
Englebright Lake	—	—	0.3%	0.6%	0.1%	—	1.0%
Blue Lake	—	0.9%	—	—	—	—	0.9%
Eagle Lake	—	0.3%	0.6%	—	—	—	0.9%
Iron Gate Reservoir	—	—	0.6%	—	—	—	0.6%
Lake Amador	—	0.6%	—	—	—	—	0.6%
Lake Natoma	—	0.6%	—	—	—	—	0.6%
Lake Wildwood	—	0.3%	—	0.3%	—	—	0.6%
San Francisco Bay	—	0.3%	—		0.3%	—	0.6%
Stony Gorge Reservoir	—	—	0.3%	0.3%	—	—	0.6%
Walnut Grove (Sac-SJ Delta)	—	—	—	0.6%	—	—	0.6%
Big Lagoon	—	0.3%	—	—	—	—	0.3%
Black Butte Lake	—	—	0.3%	—	—	—	0.3%
Trinity Lake	—	—	—	0.3%	—	—	0.3%
Cosumnes River	—	0.3%	—	—	—	—	0.3%
Englebright Reservoir	—	0.3%	—	—	—	—	0.3%
Fall River Lake	—	0.3%	—	—	—	—	0.3%
Feather River	—	—	0.3%	—	—	—	0.3%
French Meadows Reservoir	—	0.3%	—	—	—	—	0.3%
Ice House Reservoir	—	0.3%	—	—	—	—	0.3%
Knights Landing	—	0.3%	—	—	—	—	0.3%
Lake Berryessa	—	—	—	0.3%	—	—	0.3%
Lake Davis	—	0.3%	—	—	—	—	0.3%
Lake Wickiup, OR	—	0.3%	—	—	—	—	0.3%
Lake of the Pines	—	—	0.3%	—	—	—	0.3%

Source: 2001 PRI California Boat Owner Survey

Table A2.14 *(continued)*

g) Sacramento Basin (cont.)	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
Loon Lake	—	0.3%	—	—	—	—	0.3%
New Hogan Reservoir	—	—	0.3%	—	—	—	0.3%
New Melones Reservoir	—	—	0.3%	—	—	—	0.3%
Prosser Reservoir	—	0.3%	—	—	—	—	0.3%
Scotts Flat Lake	—	0.3%	—	—	—	—	0.3%
Stampede Reservoir	—	0.3%	—	—	—	—	0.3%
Stumpy Meadows Reservoir	—	0.3%	—	—	—	—	0.3%
Sugar Pine Reservoir	—	0.3%	—	—	—	—	0.3%
Tahoe City (Lake Tahoe)	—	—	—	0.3%	—	—	0.3%
Topaz Lake	—	—	0.3%	—	—	—	0.3%
Unknown	—	0.3%	—	—	—	—	0.3%
San Joaquin River	—	—	—	—	0.1%	—	0.1%
Total	2.4%	46.4%	32.7%	15.2%	3.0%	0.3%	100%

h) Central Valley (N=546)	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
None stated	1.5%	18.5%	10.1%	3.1%	0.7%	—	33.9%
Sac-San Joaquin Delta	0.4%	1.8%	3.1%	1.5%	0.4%	—	7.1%
Lake McClure	0.9%	3.1%	0.9%	0.4%	0.2%	—	5.5%
Lake Don Pedro	0.4%	1.3%	1.3%	0.5%	—	0.2%	3.7%
Pine Flat Lake	—	0.9%	1.5%	0.9%	0.2%	—	3.5%
Millerton Lake	0.4%	0.4%	0.9%	1.3%	—	—	2.9%
Huntington Lake	0.4%	1.5%	0.5%	0.4%	—	—	2.7%
Lake Isabella	1.5%	0.5%	0.4%	—	—	—	2.4%
New Melones Reservoir	—	0.5%	0.9%	0.9%	—	—	2.4%
Pacific Ocean	0.9%	0.4%	0.4%	0.5%	0.2%	—	2.4%
San Joaquin River	—	1.3%	0.5%	—	0.5%	—	2.4%
Bass Lake	—	1.3%	0.4%	0.5%	—	—	2.2%
Success Lake	—	1.3%	0.5%	0.4%	—	—	2.2%
Shaver Lake	—	0.5%	1.3%	—	—	—	1.8%
Kaweah Reservoir	0.4%	0.4%	0.9%	—	—	—	1.6%
Modesto Reservoir	0.5%	0.5%	0.4%	—	—	—	1.5%
Tulloch Reservoir	0.5%	0.9%	—	—	—	—	1.5%
Mokelumne River	—	0.4%	0.9%	—	—	—	1.3%
Kings River	0.4%	0.4%	—	0.4%	—	—	1.1%
Eastman Lake	—	0.4%	0.5%	—	—	—	0.9%
Hensley Lake	—	0.4%	0.5%	—	—	—	0.9%
Lake Camanche	—	—	0.9%	—	—	—	0.9%
Monterey Bay	—	—	0.4%	0.5%	—	—	0.9%
Buena Vista Lakes	—	—	0.4%	0.4%	—	—	0.7%
Cherry Lake	—	0.4%	0.4%	—	—	—	0.7%
Crowley Lake	—	0.4%	0.4%	—	—	—	0.7%
New Hogan Reservoir	—	—	0.4%	0.4%	—	—	0.7%
Rio Vista	—	0.4%	0.4%	—	—	—	0.7%
Woodward Reservoir	—	—	0.4%	0.4%	—	—	0.7%
Lake McCloud	—	—	0.5%	—	—	—	0.5%

Source: 2001 PRI California Boat Owner Survey

Table A2.14 ***(continued)***

h) Central Valley *(cont.)*	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
Sacramento River	—	—	0.4%	—	0.2%	—	0.5%
Silver Lake	—	0.5%	—	—	—	—	0.5%
Turlock Lake	—	0.5%	—	—	—	—	0.5%
Calaveras River	—	—	0.4%	—	—	—	0.4%
Courtright Reservoir	—	0.4%	—	—	—	—	0.4%
Hume Lake	—	0.4%	—	—	—	—	0.4%
Lake Amador	—	0.4%	—	—	—	—	0.4%
Lake Buena Vista	—	—	0.4%	—	—	—	0.4%
Lake Davis	—	0.4%	—	—	—	—	0.4%
Lake McSwain	—	0.4%	—	—	—	—	0.4%
Lake Pardee	—	—	0.4%	—	—	—	0.4%
Lake San Antonio	—	—	0.4%	—	—	—	0.4%
Lake Tulloch	—	—	0.4%	—	—	—	0.4%
Lake Yosemite	—	0.4%	—	—	—	—	0.4%
Lewiston Lake	—	0.4%	—	—	—	—	0.4%
Los Banos Creek Reservoir	—	0.4%	—	—	—	—	0.4%
Morro Bay	—	—	—	0.4%	—	—	0.4%
Pine Mountain Lake	—	0.4%	—	—	—	—	0.4%
Pinecrest Lake	—	0.4%	—	—	—	—	0.4%
Pyramid Lake	—	—	0.4%	—	—	—	0.4%
San Francisco Bay	—	—	—	0.4%	—	—	0.4%
San Luis Reservoir	—	—	0.4%	—	—	—	0.4%
Tomales Bay	—	—	0.4%	—	—	—	0.4%
Wishon Reservoir	—	0.4%	—	—	—	—	0.4%
Total	**8.1%**	**42.9%**	**33.3%**	**13.2%**	**2.4%**	**0.2%**	**100%**

i) Eastern Sierra *(N=6)*	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
None stated	—	50.0%	16.7%	—	—	—	66.7%
Crowley Lake	—	16.7%	16.7%	—	—	—	33.3%
Total	**—**	**66.7%**	**33.3%**	**—**	**—**	**—**	**100%**

Source: 2001 PRI California Boat Owner Survey

Table A2.14 ***(continued)***

j) Southern Interior *(N=419)*	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
None stated	4.1%	10.0%	12.9%	2.9%	0.5%	—	30.3%
Colorado River	12.4%	0.5%	7.2%	2.4%	0.2%	—	22.7%
Lake Perris	1.7%	2.4%	3.6%	1.7%	—	—	9.3%
Lake Havasu	1.9%	0.5%	1.2%	3.1%	—	—	6.7%
Big Bear Lake	0.7%	1.7%	1.7%	—	—	—	4.1%
Pacific Ocean	—	—	1.7%	0.7%	0.5%	—	2.9%
Lake Mohave	0.7%	—	1.9%	—	—	—	2.6%
Silverwood Lake	0.5%	—	1.9%	—	—	—	2.4%
Lake Elsinore	0.5%	0.5%	—	1.2%	—	—	2.1%
Lake Mead	0.7%	0.5%	—	0.5%	—	—	1.7%
Lake Skinner	—	0.7%	0.7%	—	—	—	1.4%
Mission Bay	—	—	0.7%	0.5%	—	—	1.2%
Lake San Antonio	—	0.5%	—	0.5%	—	—	1.0%
Shasta Lake	—	0.5%	—	0.5%	—	—	1.0%
Salton Sea	—	0.5%	—	0.5%	—	—	1.0%
Ramer Lake	—	—	—	0.7%	—	—	0.7%
Big River	0.5%	—	—	—	—	—	0.5%
Blythe (Colorado River)	—	—	0.5%	—	—	—	0.5%
Canyon Lake	—	—	0.5%	—	—	—	0.5%
Dana Harbor	—	—	—	0.5%	—	—	0.5%
Kings River	0.5%	—	—	—	—	—	0.5%
Lake Cachuma	—	—	0.5%	—	—	—	0.5%
Lake Casitas	—	—	0.5%	—	—	—	0.5%
Lake Hemet	—	0.5%	—	—	—	—	0.5%
Lake Nacimiento	0.5%	—	—	—	—	—	0.5%
Lake Powell	0.5%	—	—	—	—	—	0.5%
Lake Tahoe	—	0.5%	—	—	—	—	0.5%
Newport Harbor	—	—	0.5%	—	—	—	0.5%
Oceanside Harbor	—	—	—	0.5%	—	—	0.5%
San Diego Bay	—	—	—	—	0.5%	—	0.5%
Silver Lake	—	0.5%	—	—	—	—	0.5%
Spring Lake	—	0.5%	—	—	—	—	0.5%
Wiest Lake	0.5%	—	—	—	—	—	0.5%
Unknown	—	—	0.5%	—	—	—	0.5%
Catalina Channel	—	—	—	—	0.2%	—	0.2%
L.A.-Long Beach Harbor	—	—	—	—	0.2%	—	0.2%
Total	**25.5%**	**20.0%**	**36.3%**	**16.0%**	**2.1%**	**—**	**100%**

Source: 2001 PRI California Boat Owner Survey

Problems at Waterways

The next set of tables identify waterways with problems, as specified by the respondents.

Table A2.15
Insufficient Water Depth, Top Waterways (N=35)

(Percent of total N)

Waterway	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
1. Lake Mohave	—	—	17.2%	—	—	—	17.2%
2. Sac-San Joaquin Delta	—	5.7%	—	5.7%	2.9%	—	14.3%
3. Sacramento River	—	14.3%	—	—	—	—	14.3%
4. Silverwood Lake	5.7%	—	5.7%	—	—	—	11.4%
5. San Joaquin River	—	—	5.7%	—	2.9%	—	8.6%
6. Colorado River	5.7%	—	—	—	—	—	5.7%
7. Lake Don Pedro	—	—	5.7%	—	—	—	5.7%
8. Lake McClure	—	5.7%	—	—	—	—	5.7%
9. San Diego Bay	—	—	2.8%	—	2.9%	—	5.7%
10. Santa Barbara Channel	—	—	—	—	5.7%	—	5.7%
11. Lake Sonoma	—	—	2.8%	—	—	—	2.8%
12. San Francisco Bay	—	—	—	—	2.9%	—	2.9%

Source: 2001 PRI California Boat Owner Survey

Table A2.16
Overcrowding, Top Waterways (N=128)

(Percent of total N)

Waterway	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
1. Lake Perris	—	4.7%	6.3%	1.6%	—	—	12.5%
2. Mission Bay	0.8%	0.8%	9.4%	—	—	—	10.9%
3. Colorado River	5.5%	—	4.7%	—	—	—	10.1%
4. Folsom Lake	1.6%	—	3.1%	3.1%	—	—	7.8%
5. Lake Berryessa	—	—	5.5%	1.6%	—	—	7.0%

Source: 2001 PRI California Boat Owner Survey

Table A2.17
Reckless Boaters, Top Waterways (N=35)

(Percent of total N)

Waterway	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
1. Lake Mohave	—	—	17.2%	—	—	—	17.2%
2. Sac-San Joaquin Delta	—	5.7%	—	5.7%	2.9%	—	14.3%
3. Sacramento River	—	14.3%	—	—	—	—	14.3%
4. Silverwood Lake	5.7%	—	5.7%	—	—	—	11.4%
5. San Joaquin River	—	—	5.7%	—	2.9%	—	8.6%
6. Colorado River	5.7%	—	—	—	—	—	5.7%
7. Lake Don Pedro	—	—	5.7%	—	—	—	5.7%
8. Lake McClure	—	5.7%	—	—	—	—	5.7%
9. San Diego Bay	—	—	2.8%	—	2.9%	—	5.7%
10. Santa Barbara Channel	—	—	—	—	5.7%	—	5.7%

Source: 2001 PRI California Boat Owner Survey

Table A2.18
Reckless PWC Operators, Top Waterways (N=73)

(Percent of total N)

Waterway	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
1. Channel Islands Harbor	—	—	—	8.2%	—	—	8.2%
2. Dana Harbor	—	8.2%	—	—	—	—	8.2%
3. Sac-San Joaquin Delta	—	5.5%	2.7%	—	—	—	8.2%
4. Sacramento River	—	2.7%	5.5%	—	—	—	8.2%
5. Coyote Lake (Reservoir)	—	6.9%	—	—	—	—	6.9%
6. Shasta Lake	—	—	—	5.5%	—	—	5.5%
7. Oceanside Harbor	—	4.1%	—	1.4%	—	—	5.5%
8. Colorado River	4.1%	—	—	—	—	—	4.1%
9. Lake Berryessa	—	1.4%	—	2.7%	—	—	4.1%
10. Millerton Lake	—	—	—	4.1%	—	—	4.1%
11. San Joaquin River	—	2.7%	—	—	1.4%	—	4.1%

Source: 2001 PRI California Boat Owner Survey

Table A2.19
Invasive Species, Top Waterways (N=43)

(Percent of total N)

	Waterway	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
1.	Clear Lake	4.7%	4.7%	37.2%	9.3%	—	—	55.8%
2.	Sac-San Joaquin Delta	—	—	4.7%	—	4.7%	2.3%	11.6%
3.	San Diego Bay	—	2.3%	—	7.0%	—	—	9.3%
4.	Lake Isabella	4.7%	—	—	—	—	—	4.7%
5.	Lake Perris	—	—	4.7%	—	—	—	4.7%
6.	New Hogan Reservoir	—	—	4.7%	—	—	—	4.7%
7.	Sacramento River	—	4.7%	—	—	—	—	4.7%
8.	San Joaquin River	—	—	—	—	4.7%	—	4.7%

Source: 2001 PRI California Boat Owner Survey

Table A2.20
Congestion at Launch Ramps, Top Waterways (N=39)

(Percent of total N)

	Waterway	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
1.	Sac-San Joaquin Delta	—	—	12.8%	—	—	—	12.8%
2.	Shasta Lake	—	—	5.1%	5.1%	—	—	10.2%
3.	Sacramento River	—	—	10.3%	—	—	—	10.3%
4.	Pacific Ocean	—	—	—	7.7%	—	—	7.7%
5.	Shaver Lake	—	—	7.7%	—	—	—	7.7%

Source: 2001 PRI California Boat Owner Survey

Facilities Needs at Most-Used Waterways

The next set of tables identify facility needs recommended by boaters for their most-used waterways.

Table A2.21
Facility Expansion, Top Waterways (N=83)

(Percent of total N)

Waterway	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
1. Lake Berryessa	—	—	8.4%	—	—	—	8.4%
2. Castaic Lake	—	—	—	7.2%	—	—	7.2%
3. Colorado River	6.0%	—	1.2%	—	—	—	7.2%
4. Huntington Harbor	—	—	—	7.2%	—	—	7.2%
5. L.A.-Long Beach Harbor	—	—	7.2%	—	—	—	7.2%
6. Anderson Lake	—	—	6.0%	—	—	—	6.0%
7. Napa River	—	—	6.0%	—	—	—	6.0%
8. Pacific Ocean	—	—	—	4.8%	1.2%	—	6.0%

Source: 2001 PRI California Boat Owner Survey

Table A2.22
Launching Capacity, Top Waterways for Waterway 1 (N=139)

(Percent of total N)

Waterway 1	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
1. Channel Islands Harbor	—	8.6%	4.3%	—	—	—	13.0%
2. Pacific Ocean	—	—	2.2%	7.2%	1.4%	—	10.8%
3. Lake Mohave	0.7%	—	—	4.3%	0.7%	—	5.8%
4. Sac-San Joaquin Delta	—	—	5.0%	—	—	—	5.0%
5. Lake Elsinore	4.3%	—	—	—	—	—	4.3%
6. Sacramento River	—	1.4%	2.9%	—	—	—	4.3%
7. San Diego Bay	—	0.7%	0.7%	2.9%	—	—	4.3%
8. Lake Havasu	1.4%	1.4%	—	—	0.7%	—	3.6%
9. Lake Tahoe	—	3.6%	—	—	—	—	3.6%
10. Bodega Bay	—	0.7%	—	2.2%	—	—	2.9%
11. Lake Oroville	—	1.4%	1.4%	—	—	—	2.9%
12. Shasta Lake	—	1.4%	1.4%	—	—	—	2.9%
13. Mission Bay	—	2.2%	0.7%	—	—	—	2.9%
14. Monterey Bay	—	—	—	2.9%	—	—	2.9%
15. Pine Flat Lake	—	—	1.4%	1.4%	—	—	2.9%

Source: 2001 PRI California Boat Owner Survey

Table A2.23
Launching Capacity, Top Waterways for Waterway 2 (N=103)

(Percent of total N)

Waterway 2	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
1. Lake Piru	—	—	11.7%	—	—	—	11.7%
2. Lake Berryessa	—	—	9.7%	—	—	—	9.7%
3. Alamitos Bay	—	5.8%	—	—	—	—	5.8%
4. Big Bear Lake	—	—	—	5.8%	—	—	5.8%
5. Lake Casitas	—	5.8%	—	—	—	—	5.8%
6. Pyramid Lake	5.8%	—	—	—	—	—	5.8%
7. Bass Lake	—	2.0%	2.0%	—	—	—	3.9%
8. Eagle Lake	—	2.9%	—	—	—	—	2.9%
9. San Diego Bay	—	2.9%	—	—	—	—	2.9%

Source: 2001 PRI California Boat Owner Survey

Table A2.24
Better Restrooms, Top Waterways (N=44)

(Percent of total N)

Waterway	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
1. Lake San Antonio	13.6%	—	4.5%	2.3%	—	—	20.5%
2. Anaheim Bay	—	—	—	13.6%	—	—	13.6%
3. Sacramento River	—	—	9.1%	—	—	—	9.1%
4. Lake Elsinore	—	—	—	6.8%	—	—	6.8%
5. Lake Perris	—	—	—	6.8%	—	—	6.8%
6. Anderson Lake	—	4.5%	—	—	—	—	4.5%
7. Big River	4.5%	—	—	—	—	—	4.5%
8. Colorado River	4.5%	—	—	—	—	—	4.5%
9. Lake Cachuma	—	—	4.5%	—	—	—	4.5%
10. Lake Tahoe	—	—	—	4.6%	—	—	4.6%
11. Modesto Reservoir	—	4.5%	—	—	—	—	4.5%
12. Napa River	—	4.5%	—	—	—	—	4.5%
13. Sac-San Joaquin Delta	—	—	—	4.6%	—	—	4.6%
14. San Joaquin River	—	—	4.5%	—	—	—	4.5%

Source: 2001 PRI California Boat Owner Survey

Table A2.25
Needs Campgrounds, Top Waterways, Waterway 1 (N=47)

(Percent of total N)

Waterway 1	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
1. Lake Isabella	19.1%	—	—	—	—	—	19.1%
2. Pyramid Lake	12.8%	—	—	—	—	—	12.8%
3. Lake Oroville	—	4.3%	4.3%	—	—	—	8.5%
4. Lake Havasu	6.4%	—	—	—	—	—	6.4%
5. Modesto Reservoir	6.4%	—	—	—	—	—	6.4%

Source: 2001 PRI California Boat Owner Survey

Table A2.26
Needs Campgrounds, Top Waterways, Waterway 2 (N=29)

(Percent of total N)

Waterway 2	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
1. Pine Flat Lake	41.4%	—	—	—	—	—	41.4%
2. Shasta Lake	—	—	10.3%	—	—	—	10.3%
3. Big Bear Lake	—	6.9%	—	—	—	—	6.9%
4. Clear Lake	—	—	6.9%	—	—	—	6.9%
5. Lake Don Pedro	—	6.9%	—	—	—	—	6.9%
6. Lake Pillsbury	—	—	6.9%	—	—	—	6.9%
7. New Hogan Reservoir	—	—	6.9%	—	—	—	6.9%
8. San Joaquin River	—	—	6.9%	—	—	—	6.9%

Source: 2001 PRI California Boat Owner Survey

Table A2.27
More Docks, Top Waterways (N=41)

(Percent of total N)

Waterway	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
1. Dana Harbor	—	14.6%	—	—	—	—	14.6%
2. Oakland Estuary	—	—	—	12.2%	—	—	12.2%
3. San Francisco Bay	—	—	—	4.9%	2.4%	—	7.3%
4. Bass Lake	—	4.9%	—	—	—	—	4.9%
5. Blue Lake	—	4.9%	—	—	—	—	4.9%
6. Jenkinson Lake	—	—	4.9%	—	—	—	4.9%
7. Lake Perris	—	—	4.9%	—	—	—	4.9%
8. Millerton Lake	—	—		4.9%	—	—	4.9%
9. San Diego Bay	—	—	2.4%	—	2.4%	—	4.9%
10. San Joaquin River	—	4.9%	—	—	—	—	4.9%
11. Tomales Bay	—	—	—	2.4%	2.4%	—	4.9%
12. Whiskeytown Lake	—	—	4.9%	—	—	—	4.9%

Source: 2001 PRI California Boat Owner Survey

Unused Waterways with Facilities Needs

The next set of tables identify facility needs recommended for unused waterways.

Table A2.28
Launching Capacity, Top Unused Waterways (N=107) (Percent of total N)

Waterway	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
1. San Diego Bay	—	2.8%	22.4%	—	—	—	25.2%
2. Sacramento River (Sacramento area)	—	5.6%	2.8%	2.8%	—	—	11.2%
3. Lake Isabella	—	5.6%	—	—	—	—	5.6%
4. Sac-San Joaquin Delta	—	1.9%	—	1.9%	—	—	3.7%
5. Silverwood Lake	1.9%	—	1.9%	—	—	—	3.7%
6. Lake Sonoma	—	2.8%	—	—	—	—	2.8%
7. San Francisco Bay (West)	—	—	1.9%	0.9%	—	—	2.8%
8. San Joaquin River	—	2.8%	—	—	—	—	2.8%
9. Lake Tahoe (Tahoe City)	—	2.8%	—	—	—	—	2.8%
10. Diamond Valley Reservoir	—	—	1.9%	—	—	—	1.9%
11. Pacific Ocean (Drake's Bay)	—	—	—	1.9%	—	—	1.9%
12. East Park Reservoir	—	—	1.9%	—	—	—	1.9%
13. Feather River	—	1.9%	—	—	—	—	1.9%
14. Folsom Lake	—	—	—	1.9%	—	—	1.9%
15. Gold Lake	—	1.9%	—	—	—	—	1.9%
16. Kaweah Reservoir	1.9%	—	—	—	—	—	1.9%
17. Lake Chabot	—	—	1.9%	—	—	—	1.9%
18. Lake Elsinore	1.9%	—	—	—	—	—	1.9%
19. Lake Oroville	—	—	1.9%	—	—	—	1.9%
20. Lake Tahoe	—	—	—	1.9%	—	—	1.9%
21. Monterey Bay (Moss Landing)	—	—	1.9%	—	—	—	1.9%
22. Oakland Estuary	—	—	1.9%	—	—	—	1.9%
23. San Francisco Bay	—	—	—	1.9%	—	—	1.9%
24. San Pablo Bay	—	1.9%	—	—	—	—	1.9%
25. Slab Creek Reservoir	—	—	1.9%	—	—	—	1.9%
26. Lake Tahoe (South)	—	—	1.9%	—	—	—	1.9%
27. Stanislaus River	—	—	1.9%	—	—	—	1.9%
28. Success Lake	—	—	1.9%	—	—	—	1.9%
29. Colorado River	—	—	0.9%	—	—	—	0.9%
30. El Capitan Lake	—	—	0.9%	—	—	—	0.9%
31. Lake Perris	—	0.9%	—	—	—	—	0.9%
32. Pacific Ocean	—	0.9%	—	—	—	—	0.9%
Total	5.6%	31.7%	49.7%	13.1%	—	—	100%

Table A2.29
More Public Access, Top Unused Waterways (N=26) (Percent of total N)

Waterway	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
1. Diamond Valley Reservoir	7.7%	—	—	7.7%	—	—	15.4%
2. Sac-San Joaquin Delta	—	7.7%	7.7%	—	—	—	15.4%
3. Sacramento River (Sacramento area)	—	—	15.4%	—	—	—	15.4%
4. American River	—	—	—	7.7%	—	—	7.7%
5. Calaveras Reservoir	7.7%	—	—	—	—	—	7.7%
6. Lake Almanor	—	—	—	7.7%	—	—	7.7%
7. Lake Hemet	—	7.7%	—	—	—	—	7.7%
8. Shasta Lake	—	—	7.7%	—	—	—	7.7%
9. San Joaquin River	—	—	7.7%	—	—	—	7.7%
10. Colorado River	—	—	—	—	3.8%	—	3.8%
11. L.A.-Long Beach Harbor	—	—	—	—	3.8%	—	3.8%
Total	15.4%	15.4%	38.5%	23.1%	7.7%	—	100%

Table A2.30
Dredging, Top Unused Waterways (N=16) (Percent of total N)

Unused Waterway 1	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
1. Petaluma River	—	—	—	18.8%	—	—	18.8%
2. Carquinez Strait	—	12.5%	—	—	—	—	12.5%
3. Lake Davis	—	—	12.5%	—	—	—	12.5%
4. Mendota Slough	—	12.5%	—	—	—	—	12.5%
5. San Joaquin River	—	—	—	12.5%	—	—	12.5%
6. Stanislaus River	—	—	12.5%	—	—	—	12.5%
7. Alviso Harbor	—	—	—	—	6.3%	—	6.3%
8. Lake Elsinore	—	—	6.3%	—	—	—	6.3%
9. San Rafael Canal	—	—	—	—	6.3%	—	6.3%
Total		25.0%	31.3%	31.3%	12.5%	—	100%

Table A2.31
Improve Water Quality, Top Unused Waterways (N=57)

(Percent of total N)

Unused Waterway 1	<16', Jet	<16', Other	16'-19'11"	20'-25'11"	26'-39'11"	40' +	All
1. Lake Perris	24.6%	—	3.5%	—	—	—	28.1%
2. Lake Elsinore	5.3%	—	3.5%	15.8%	—	—	24.6%
3. Lake Buena Vista	—	—	10.5%	—	—	—	10.5%
4. Sacramento River	—	3.5%	3.5%	—	—	—	7.0%
5. Lake Almanor	—	—	—	3.5%	—	—	3.5%
6. Lake Camanche	3.5%	—	—	—	—	—	3.5%
7. Monterey Bay	—	—	—	3.5%	—	—	3.5%
8. Napa River	—	—	3.5%	—	—	—	3.5%
9. Salton Sea	—	—	3.5%	—	—	—	3.5%
10. San Francisco Bay (West)	—	—	—	3.5%	—	—	3.5%
11. Silverwood Lake	3.5%	—	—	—	—	—	3.5%
12. L.A.-Long Beach Harbor	—	—	—	—	1.8%	—	1.8%
13. Mission Bay	—	—	—	1.8%	—	—	1.8%
14. Santa Monica Bay	—	—	—	—	1.8%	—	1.8%
Total	36.8%	3.5%	28.1%	28.1%	3.5%	—	100%

Appendix A3

Data on California Boats

Under Federal law, all vessels "equipped with propulsion machinery" must be documented with the U.S. Department of Transportation, or registered with the principal state in which they are used. Under California law, sailboats over 8 feet (but not hand-propelled boats) must also be registered. For statistical purposes, then, Californian boats fall in three major groups:

- Boats documented with the U.S. Department of Transportation: this form of registration is chosen mainly by ocean cruising and fishing boats to facilitate travel to foreign ports. On December 31, 2000, 20,716 boats were documented with California addresses. "Boats" were defined as vessels in recreational or fishing registry.
- Boats registered with the California Department of Motor Vehicles (DMV), a large majority of boats in use. On December 31, 2000, 902,447 boats were registered with DMV.
- Unregistered boats, of which most are hand-powered, hand-launched vessels like kayaks, canoes, and rowboats. An estimate of their population in the state, derived from National Marine Manufacturers Association statistics, is 97,000.[1] Also unregistered are a few unpowered houseboats with permanent sewage connections to shore. Very few sailboats exist that are under 8 feet long. In sum, there are approximately 1.02 million boats in California.

Both Federal and DMV vessel data contain information on the owner's name and address and the boat's length, propulsion, and hull material. Numerous other descriptors are included in one or the other file, but not in both.

Federal data on documented vessels are published quarterly in CD-ROM form by the National Technical Information Service as "Merchant Vessels of the United States."

DMV data were derived from the DMV report "RID 6714", dated December 31, 2000. A full listing of the DMV vessel data base was provided on magnetic tapes to the Department of Boating and Waterways for this study. The tapes were run two days earlier than the tables and do not exactly match the summary tables. Some discrepancies were large, suggesting that a very large batch of input was run between the two dates.

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[1] NMMA Boat population estimates for USA for 2000:

Registered	15,344,300	90.45%
Unregistered	1,620,900	9.55%
Total	16,965,200	100.00%

Applying these percentages to California gives

Registered	90.45%	922,000
Unregistered	9.55%	97,000
Total	100.00%	1,019,000

- The sum of current plus expired records—which should be unaffected by run date—was significantly smaller in the data tape than in the DMV tables.
- The number of out-of-state addresses was 49 percent larger in the DBW tape than in the DMV tables.
- Counties whose boat counts differed impressively from the DMV tables included, Mono (33 percent smaller), Lake (25 percent smaller), Plumas (38 percent smaller), Napa (17 percent smaller), San Francisco (16 percent larger), San Mateo (12 percent larger) and Riverside (17 percent smaller).

The DMV data tapes also contained a large number of errors, omissions, and inconsistencies. These were corrected as fully as possible before preparing statistical analyses. For example:

- Thousands of address elements were in the wrong fields
- Thousands of zip codes did not match the cities named
- Thousands of boats were listed with implausible lengths for their material, make, and propulsion, such as hundreds of "80' and 800' plastic Kawasaki JetSkis."

These errors were found and corrected by searching for blank fields, by analyzing frequency distributions to spot unlikely values, and by repeatedly sorting the data base by each of these variables in various combinations and closely inspecting the results. Reference was made to outside sources such as State maps, manufacturers' web sites, and the like in order to supply missing or obviously incorrect values. No vessel records were created or deleted in this process.

In view of the remaining discrepancy between the DMV's published statistics and the data DMV supplied us, we must defer to the DMV's published statistics for purposes of estimating State and regional boat populations. Accordingly, we applied the following regional correction factors to reconcile our estimates of boat populations with the DMV table.

Table A3.1
Boat Population Correction Factors

Region	DMV RID 6714	DMV12/29 Tape	Correction Factor
1. North Coast	33,806	33,855	0.9985527
2. SF Bay Area	152,987	155,528	0.9836621
3. Central Coast	29,698	28,672	1.0357840
4. South Coast	237,259	234,769	1.0106062
5. San Diego	65,000	61,682	1.0537920
6. Northern Interior	7,789	7,768	1.0027034
7. Sacramento Basin	159,523	148,577	1.0736722
8. Central Valley	116,949	111,785	1.0461958
9. Eastern Sierra	2,933	2,475	1.1850505
10. Southern Interior	96,503	84,177	1.1464295
State subtotal	**902,447**	**869,288**	**1.0381450**
Out of State	2,396	4,721	0.4986472
Total	**904,843**	**874,093**	**1.0351793**

Appendix A4

Survey of Boat Owners in California, (April 2001 – August 2001), Sample Composition and Final Disposition Report

Universe and Sampling Frame Composition

The "universe" of potential respondents for the survey consisted of all boat owners in California who have registered their boat with either the Department of Motor Vehicles (State of California) or the U.S. Department of Transportation in the year 2001. These totals are shown in **Table A4.1**. A stratification scheme was developed to provide statistically representative results for two categories of boat length (less than 26 feet/ 26 feet or greater) across ten geographic regions of California (95 percent confidence for a 5 percent difference in a simple proportion within each region). To this end, we sampled disproportionately within region and size with the goal of completing 400 interviews on average within each region, with equal numbers within each size category.

Initially, records within this sampling frame did not contain telephone numbers. Sets of records were sent to Genesys Sampling Systems (Budget Data Systems – San Francisco) to be matched with phone numbers. Phone numbers were available for roughly one-half of the records selected (details shown in tables below). Matched sample was cleaned, purged of duplicate records, and loaded into CATI (Computer Assisted Telephone Interviewing) software for dialing. The following tables provide detail about the composition of the sample in terms of boat length and geographic region.

Table A4.2 shows the portions of boats drawn for sample from each of the 20 regions by boat length categories. As stipulated in the sampling plan, each of the 10 geographic regions was to constitute 10 percent of the sample, with the exception of the Eastern Sierra. The small number of total boats in the latter region called for all boats in that region being included in the sample. When the available pool of larger boats in a region was depleted (e.g., Northern Interior), a greater number of small boats was selected so that the region total would still reach the goal of 400 boats. Similarly, because not enough boats are registered in the Eastern Sierra region for a proportional sample, a greater number of boats overall were selected from the remaining regions to preserve an overall total goal of completed interviews with 4000 boat owners.

Table A4.3 demonstrates that the stratification scheme was reasonably well preserved among the telephone-matched sample. Slightly higher percentages of matches were found for boat owners in the North Coast and Northern Interior (11.5 percent and 12.3 percent, respectively, after matching), while slightly lower proportions of matches were found for boat owners in the South Coast and San Diego regions (9.5 percent and 9.4 percent, respectively).

Table A4.1
California Boat Population (Registered in 2001)

Region	Less than 26 Feet	26 Feet or More	Total	Percent of Total
1. North Coast	32,806	1,843	34,649	3.9%
2. SF Bay Area	144,050	16,551	160,601	18.1%
3. Central Coast	27,424	2,139	29,563	3.3%
4. South Coast	220,239	22,009	242,248	27.3%
5. San Diego	57,687	7,072	64,759	7.3%
6. Northern Interior	7,668	108	7,776	0.9%
7. Sacramento Basin	143,644	5,711	149,355	16.8%
8. Central Valley	108,135	4,039	112,174	12.6%
9. Eastern Sierra	2,439	48	2,487	0.3%
10. Southern Interior	82,375	2,447	84,822	9.5%
Total	**826,467**	**61,967**	**888,434**	**100%**

Table A4.2
Boats Sampled

Region	Less than 26 Feet	26 Feet or More	Total	Percent of Total
1. North Coast	4,002	1,829	5,831	10.5%
2. SF Bay Area	2,960	2,942	5,902	10.6%
3. Central Coast	3,631	2,124	5,815	10.5%
4. South Coast	2,974	2,945	5,919	10.7%
5. San Diego	2,989	2,913	5,902	10.6%
6. Northern Interior	5,737	108	5,845	10.5%
7. Sacramento Basin	2,991	2,935	5,926	10.7%
8. Central Valley	2,982	2,956	5,938	10.7%
9. Eastern Sierra	2,443	48	2,491	4.5%
10. Southern Interior	3,489	2,381	5,870	10.6%
Total	**33,887**	**21,552**	**55,439**	**100%**

Table A4.3
Telephone Numbers Successfully Matched (Usable Sample), Before Screening for Duplicate Returns

Region	Less than 26 Feet	26 Feet or More	Total	Percent of Total
1. North Coast	2,329	1,023	3,352	11.5%
2. SF Bay Area	1,530	1,471	3,001	10.3%
3. Central Coast	2,063	1,118	3,181	10.9%
4. South Coast	1,443	1,348	2,791	9.5%
5. San Diego	1,413	1,338	2,751	9.4%
6. Northern Interior	3,547	59	3,606	12.3%
7. Sacramento Basin	1,641	1,421	3,062	10.5%
8. Central Valley	1,670	1,502	3,172	10.9%
9. Eastern Sierra	1,375	21	1,396	4.8%
10. Southern Interior	1,799	1,120	2,919	10.0%
Total	**18,810**	**10,421**	**29,321**	**100%**

Table A4.4
Telephone Numbers Used, Including Pretest (After Removal of Duplicates)

Region	Less than 26 Feet	26 Feet or More	Total	Percent of Total
1. North Coast	2,054	631	2,685	11.4%
2. SF Bay Area	1,377	1,073	2,450	10.4%
3. Central Coast	1,761	687	2,448	10.3%
4. South Coast	1,217	935	2,152	9.1%
5. San Diego	1,167	831	1,998	8.4%
6. Northern Interior	3,063	59	3,122	13.2%
7. Sacramento Basin	1,450	1,104	2,554	10.8%
8. Central Valley	1,493	1,214	2,707	11.4%
9. Eastern Sierra	1,273	21	1,294	5.5%
10. Southern Interior	1,504	742	2,246	9.5%
Total	**16,359**	**7,297**	**23,656**	**100%**

Given the distribution of matched phone numbers shown above in Table A4.3, the following **Table A4.4** shows how that distribution was preserved among those records available for loading into the CATI software and calling attempts. (Not all available sample was needed to complete the survey objectives; 5,016 elements were never loaded.) Removal of duplicate numbers resulted in somewhat fewer cases available for dialing in southern California, suggesting slightly higher rates of multiple boat ownership in these areas.

Table A4.5
Completed Interviews (Including All Who Did Not Use Boat In 2000)

Region	Less than 26 Feet	26 Feet or More	Total	Percent of Total
1. North Coast	397	108	505	12.2%
2. SF Bay Area	241	193	434	10.5%
3. Central Coast	315	127	442	10.7%
4. South Coast	155	166	321	7.8%
5. San Diego	163	130	293	7.1%
6. Northern Interior	585	9	594	14.4%
7. Sacramento Basin	297	225	522	12.6%
8. Central Valley	267	240	507	12.3%
9. Eastern Sierra	192	4	196	4.7%
10. Southern Interior	201	122	323	7.8%
Total	**2,813**	**1,324**	**4,137**	**100%**

The final table in this series (**Table A4.5**) shows the distribution of the region-by-boat-length strata amongst the 4,137 completed interviews. The number 4,137 appears here because, for the purposes of this analysis, all of the 634 boat owners who reported during the first phase of the survey that they did not use their boat in 2000 are counted as completed interviews, whether or not we were able to contact them for the follow-up interview. Differences in the portions from each of the geographic regions between sample used and completed interviews is probably a function of differential response rates across regions, but may also reflect differences in the rate of invalid telephone numbers (e.g., disconnected phones, etc.). Generally, the completion rate was higher in the Central Valley/Sacramento and northern regions of the State than in the southern regions. A full description of the resulting weighting and confidence intervals for the various strata of the sample is provided in **Appendix A5**, following this write-up.

Interview Procedures

Telephone interviews were conducted between April 29, 2001 and August 1, 2001, using CATI (computer-assisted telephone interviewing) software. All interviews were conducted in English. Upon reaching a phone number in the database, interviewers asked for the boat owner (as listed in the database) and identified the specific boat they were calling about. Potential respondents who did not own the boat listed in the database were not considered eligible.

During the first phase of the study (April 29 through June 12, 2001), those respondents who owned the identified boat but reported that they had not used it in 2000 were considered ineligible for the interview. The second phase of the survey (June 13 through August 1, 2001) included a brief subset of survey items for those who did not use their boat in 2000. Between July 19 and August 1, 2001 those people

who during the first phase of the survey had reported that they had not used their boat in 2000 (n = 634) were re-contacted and asked to respond to the same subset of questions.

Data were collected from a total of 3,893 boat owners. Of these 387 were "non-users in 2000" (from Phase 1) reached during the follow-up portion of the survey. The remaining 247 "non-users" were either unreachable for the follow-up interview (n = 118), were determined ineligible upon the second contact (n = 61), or refused to participate in the interview when re-contacted (n = 68).

Data from completed interviews were sent to NewPoint Group in weekly increments throughout the course of the survey, with the exception of the follow-up calls to non-users. Data from that subset of interviews were recorded on paper versions of the survey, which were sent to NewPoint Group to be incorporated into the data set.

Outcomes of Attempts to Reach a Respondent by Telephone

Table A4.6 lists the possible outcome of each type of call, excepting those that resulted in a completed interview. A total of 8 attempts were made on every phone number before the record was considered "dead" and was no longer attempted.

Additional attempts on "soft" refusals are standard within CATI surveys. Interviewers were trained to code a call as a "soft" refusal if they thought there was at least a 50 percent chance that another call to the person would result in an interview. The majority of soft refusals were handled as "scheduled callbacks." Interviewers who encountered soft refusals re-scheduled those calls for a specific day and time, depending on information provided by the potential respondent.

Table A4.6
Call Outcomes

Outcome	Additional Contact Attempted?
No answer	Yes
Telephone busy	Yes
Answering machine	Yes
Disconnected phone number	No
Business phone	Asked for boat owner if appropriate
Blocked call	No
Fax tone	No
Sold boat / no longer owns	No
Did not own for 6 months in 2000	No
Already completed interview	No
Other ineligible (never owned a boat; owns a boat other than the one called about; boat owner deceased, etc.)	No
"Soft" refusal	Yes
"Hard" refusal	No
Language problem	No

Dispositions: Eligibility for Interview

Table A4.7 shows the number of calls that located a person either eligible or not eligible for the survey, and those calls for which eligibility could not be determined. The total number of records with a final disposition (n = 21,659) differs from the total number of records loaded (n = 23,656) because of records that could not be retrieved from within the CATI system when changes were made to accommodate requested revisions. There is no reason to suspect that the records that could not be retrieved affected the randomness or stratification of the sample.

Refusals are counted as eligible cases as per AAPOR guidelines.[2] It should be noted, however, that refusals sometimes occurred before it could be determined whether or not the person was eligible, i.e., that they were the person listed and did own the listed boat. The 634 cases of "did not use boat in 2000" extracted from the first phase of the study are accounted for in this table in the respective categories, i.e., completed interviews, refusals, answering machine, etc.

Two other issues affected the response rate and cooperation rate. At the time of completion of the survey, there were a relatively high number of calls that received a final disposition of "not available until study over." These are "scheduled callbacks" wherein contact with the listed person had been made, and the person had agreed to be re-contacted at a more convenient time. Callbacks are quickly generated when a large sample is loaded into the CATI system, and unfortunately a new sample of substantial size was needed as the survey was close to completion in order to meet the requested deadline. There were also a relatively high number of "answering machine" dispositions. In sum, the number of answering machine and callback dispositions reflect the fact that the final sample loaded was not thoroughly worked through when the data collection was completed.

Response Rate and Cooperation Rate

The response rate is a comparison between the number of completed interviews and the number of eligible cases, while the cooperation rate compares the number of completed interviews to the number of eligible cases actually contacted. Calculation of the response rate requires an estimation of the number of final dispositions of "eligibility not determined" that would have ultimately been eligible for the interview, had we been able to have contact.

[2] American Association of Public Opinion Research "Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys. www.aapor.org, accessed August 20, 2001

Table A4.7
Final Dispositions

Outcome	Number	Sub-total	Percent of Total
Total Eligible			
Total complete interviews	3,893		18.0%
Refusals (including initial refusals)	3,422		16.0%
Not available until study over	1,095		5.0%
		8,410	**39.0%**
Eligibility not determined			
Exceeded maximum number of attempts	1,178		5.0%
Answering machine	2,634		12.0%
No answer	1,181		5.0%
Phone busy	71		0.3%
Call substitute phone number	5		—
		5,069	**23.0%**
Not eligible			
Disconnected phone	1,827		8.0%
Business phone	196		1.0%
Fax tone	654		3.0%
Blocked call	118		0.5%
Language problem	81		0.4%
Owner not at phone number	739		3.0%
Already completed interview	90		0.4%
Sold boat/no longer owns	846		4.0%
Did not own boat for 6 months in 2000	19		—
Miscellaneous not eligible	3,610		17.0%
		8,180	**38.0%**
Total eligible, undetermined eligibility, not eligible		**21,659**	**100.0%**

We estimated that 45 percent of the "not determined" cases would have been eligible if we had been able to contact them. Thus, of the 5,069 "exceeded maximum number of attempts," "answering machine," "no answer," "phone busy," and "call substitute phone number," we estimated that 2,281 of these would have eligible if reachable. Thus the response rate was:

$$\frac{\text{completed interviews}}{\text{completed interviews + refusals + not available until study over + estimated number of eligible from unknown eligibility}}$$

or, response rate =

$$\frac{3{,}893}{3{,}893 + 3{,}422 + 1{,}095 + 2{,}281} = 36.4\%$$

As noted above, the cooperation rate is the portion of all cases interviewed of all eligible cases actually contacted. Therefore, the cooperation rate was 46.3%, calculated as

$$\frac{3{,}893 \text{ completed interviews}}{3{,}893 \text{ completed interviews} + 3{,}422 \text{ refusals} + 1{,}095 \text{ not available until study over}}$$

The relatively large number of "not available until study over" dispositions had a negative impact on the response rate and cooperation rates. As noted previously, the number of cases with this disposition was affected by loading new sample near the completion of data collection, which enabled relatively high daily totals of completed interviews (in order to meet the survey completion deadline). Including this subset of dispositions as "eligible, contacted, but not interviewed" (as in the above calculations) lowered the response rate by 4.1 percent and the cooperation rate by 6.9 percent.

Appendix A5

Survey Weighting and Confidence Intervals

Although it is common practice to present a single margin of error for survey results, the true standard errors vary across survey questions and analytical approaches. For this reason, we present confidence intervals calculated under several different scenarios. These scenarios include: simple random sampling, sample stratified by region, the use of sampling weights, and variable proportions among responses. Each of these factors has a different effect on confidence intervals and should be accounted for appropriately in statistical analyses. Additionally, non-sampling errors might result from question wording, question order effects, non-response bias, data entry mistakes, or interviewer effects. Although it is generally not possible to estimate these errors, we have attempted to minimize them through the use of standard methodologies, extensive pretesting, and rigorous quality control supervision.

Simple random sampling (initial assumptions)

Given a sample of 4,137 completed interviews, the margin of error for a simple random sample (SRS) estimate of a 50 percent population percentage is ± 1.5 percentage points at the 5 percent confidence level. Statistical theory tells us that if repeated random samples of this size were drawn from the population of boats registered in California, we can expect the corresponding percentage of the population to fall within this interval 95 percent of the time. The margin of error is larger for sample subgroups. For example, the results per region have a margin of error of ± 4.0 to ± 7.0 percentage points. For a more skewed (and more typical of survey responses) distribution of 75 percent/25 percent, confidence intervals are smaller, ± 1.3 percent for the entire sample and ranging from 3.5 to 6.1 percent by region. SRS assumptions are useful for comparison purposes (survey results are frequently published with standard errors based only on SRS assumptions) and for evaluating the adequacy of the sample. Study design effects could not be calculated in advance of data collection because of inevitable differences in response rates by region; thus the sampling plan was based on SRS assumptions (385 interviews per region would yield a 95 percent confidence interval (CI) of less than ± 5 percent).

95 Percent Confidence Interval (% ±) for a Simple Random Sample, Entire Sample

Proportion	N	CI
50% / 50%	4,137	1.5
75% / 25%	4,137	1.3

95 Percent Confidence Interval (% ±) for a Simple Random Sample within Region

	N	50%/ 50%	75%/ 25%
1. North Coast	505	4.4	3.8
2. SF Bay Area	434	4.7	4.1
3. Central Coast	442	4.7	4.0
4. South Coast	321	5.5	4.7
5. San Diego	293	5.7	5.0
6. Northern Interior*	594	4.0	3.5
7. Sacramento Basin	522	4.3	3.7
8. Central Valley	507	4.4	3.8
9. Eastern Sierra*	196	7.0	6.1
10. Southern Interior	323	5.5	4.7

*Not correcting for finite population (see below).

The sample for the 2001 boater needs study was drawn with the intention of providing the greatest possible representation of California boaters across the 10 regions, given a total of 4,000 interviews. To this end, the sample was stratified within region and boat length (less than 26 feet vs. 26 feet or more) so that an even distribution of interviews would result in 400 interviews per region on average. The differential rates of telephone number matching and nonresponse across region resulted in some variability across region, with numbers of completed interviews ranging from 196 in Eastern Sierra (primarily limited by the small number of boats in that region) to 594 in the Northern Interior. In addition to Eastern Sierra, the South Coast, San Diego, and Southern Interior regions all fell somewhat short of their intended targets, resulting in slightly higher confidence intervals (up to 0.7 of one percentage point) in those regions. However, if experience suggests that these regions have similar interests and could be justifiably combined for selected analyses, much smaller confidence intervals could be attained (i.e., ± 4 percent or less for the combination of the South Coast and San Diego regions).

Confidence Intervals Adjusted for Design Effects

Because of the disproportionate sampling design adopted to ensure adequate representation of California boaters, confidence intervals are affected by both the stratification scheme and the associated sampling weights (weights are presented below). The following tables show 95 percent confidence intervals for the entire sample and by region, for unweighted and weighted results, and for 50 percent/50 percent proportions and 75 percent/25 percent proportions. Estimates were calculated based on randomly generated binary variables, using the Stata 7 (Stata Corporation, 2001) statistical package. In two regions (Eastern Sierra and Northern Interior), sampling fractions were sufficient to justify an adjustment for finite population.

Given a sample of 4,137 completed interviews, the adjusted margin of error for of a 50 percent population percentage is ± 2.7 percentage points at the 95 percent confidence level. As described previously, the margin of error is larger for sample subgroups (results per region have a margin of error of ± 4.0 to ± 6.7 percentage points). For a distribution of 75 percent/25 percent proportions, confidence intervals are again smaller; ± 2.3 percent for the entire sample and ranging from 3.5

to 6.0 percent by region. These results are the most accurate estimate of confidence intervals for the current sample, but are on average slightly wider than those calculated using only SRS assumptions.

95 Percent Confidence Interval (% ±) for a Random Proportion, Entire Sample, Adjusted for Design Effects

	Unweighted	Weighted (region and length)
50% / 50%	1.5	2.7
75% / 25%	1.3	2.3

95 Percent Confidence Interval (% ±) for a 50 Percent/50 Percent Proportion, by Region and Adjusted for Design Effects

	Unweighted	Weighted (region and length)
1. North Coast	4.2	4.5
2. SF Bay Area	4.7	5.7
3. Central Coast	4.7	5.2
4. South Coast	5.5	7.2
5. San Diego	5.7	6.9
6. Northern Interior*	4.0	4.0
7. Sacramento Basin	4.3	5.5
8. Central Valley	4.4	5.8
9. Eastern Sierra*	6.7	6.7
10. Southern Interior	5.4	6.7

95 Percent Confidence Interval (% ±) for A 75 Percent/25 Percent Proportion, by Region and Adjusted for Design Effects

	Unweighted	Weighted (region and length)
1. North Coast	3.8	4.1
2. SF Bay Area	4.1	4.9
3. Central Coast	4.1	4.5
4. South Coast	4.6	6.4
5. San Diego	4.8	5.6
6. Northern Interior*	3.3	3.3
7. Sacramento Basin	3.9	5.0
8. Central Valley	3.8	5.0
9. Eastern Sierra*	6.0	6.0
10. Southern Interior	4.6	5.7

* Statistic includes adjustment for finite population (sampling fraction approximately 7% in both cases)

Calculation of Sampling Weights

Two sets of weights were calculated to adjust for disproportionate sampling by region, and by (population proportion divided by sample proportion). In addition, because individuals were only interviewed once regardless of the number of boats they owned, boats owned by the same individual were somewhat more likely and owners of multiple boats somewhat less likely to be interviewed. An adjustment weight was calculated by matching boats according to the names and addresses of the owners, using the sum of the number of matches to obtain a weight for the correct number of boats and the reciprocal of that number to obtain the correct number of owners. Some name and address records of boat owners did not match because of typographical errors in the sample records; thus the findings based on these weights are conservative in that they represent only a partial adjustment for multiple boat

ownership. (On the other hand some boats are owned by two or more individuals, which will tend to offset this error.) For analyses within region, only the length and multiple-boat-ownership weightings need be applied, but for statewide analyses, the combined weights should be used (described as "mainwt" in the syntax below). When applied to the complete sample (including all respondents who reported no use of their boat in the year 2000), this weight will correctly reproduce the proportions of boats registered in California in the year 2000 within region and length categories (< 26′ vs 26′ or more). For analyses of subsamples, it is recommended that the weights be rescaled by dividing them by the subsample mean of the weight variable. The following tables present the calculated weights and SPSS syntax used to assign them:

Sampling Weights for Number of Boats

Region	Weight factor	Less than 26 feet	26 feet or more
1. North Coast	region	0.28554095	0.28554095
	length	1.07639619	0.22228519
	length and region	0.34389973	0.07101829
2. SF Bay Area	region	1.5400244	1.5400244
	length	1.44359853	0.20711753
	length and region	2.48751271	0.35689111
3. Central Coast	region	0.27835262	0.27835262
	length	1.16332961	0.22505523
	length and region	0.36231755	0.07009317
4. South Coast	region	3.14068407	3.14068407
	length	1.68273653	0.15701653
	length and region	5.91332362	0.55177359
5. San Diego	region	0.91981736	0.91981736
	length	1.43108893	0.21997587
	length and region	1.47285331	0.22639557
6. Northern Interior	region	0.05448022	0.05448022
	length	0.89488078	0.81925257
	length and region	0.05455008	0.04993993
7. Sacramento Basin	region	1.19074385	1.19074385
	length	1.51074269	0.07928448
	length and region	2.01279768	0.10563255
8. Central Valley	region	0.92077458	0.92077458
	length	1.6359857	0.06798078
	length and region	1.68548193	0.07003752
9. Eastern Sierra	region	0.05280668	0.05280668
	length	0.89474564	0.84522084
	length and region	0.0528664	0.0499402
10. Southern Interior	region	1.09288651	1.09288651
	length	1.39476843	0.06826151
	length and region	1.70556569	0.08347227

Sampling Weights for Number of Owners

Region	Weight factor	Less than 26 feet	26 feet or more
1. North Coast	region	0.33698109	0.33698109
	length	1.27030872	0.26232982
	length and region	0.40585319	0.08381221
2. SF Bay Area	region	1.81745945	1.81745945
	length	1.70366248	0.2444297
	length and region	2.93563756	0.42118496
3. Central Coast	region	0.32849779	0.32849779
	length	1.37290317	0.26559888
	length and region	0.42758898	0.08272044
4. South Coast	region	3.7064776	3.7064776
	length	1.98588113	0.18530303
	length and region	6.97860753	0.65117548
5. San Diego	region	1.08552224	1.08552224
	length	1.68889927	0.25960447
	length and region	1.7381875	0.26718068
6. Northern Interior	region	0.06429482	0.06429482
	length	1.05609334	0.96684073
	length and region	0.06437726	0.0589366
7. Sacramento Basin	region	1.40525608	1.40525608
	length	1.78290265	0.09356756
	length and region	2.37540272	0.12466223
8. Central Valley	region	1.08665191	1.08665191
	length	1.93070815	0.08022751
	length and region	1.98912112	0.08265476
9. Eastern Sierra	region	0.06231979	0.06231979
	length	1.05593387	0.99748718
	length and region	0.06239026	0.05893692
10. Southern Interior	region	1.28976977	1.28976977
	length	1.64603565	0.0805588
	length and region	2.01282296	0.09850978

SPSS syntax for calculation of sampling weights for California Boater Needs Survey

```
compute len3 = 0.
if length < 26 len3 = 1.
if length > 25 len3 = 2.
value labels len3 1 "Less than 26 feet"
     2 "26 feet or more".
missing values len3 (0).
compute len3 = lengthcl.
compute ew = -9.
if region = "CC" ew = 66.884615.
if region = "CV" ew = 221.25049.
if region = "ES" ew = 12.688776.
if region = "NC" ew = 68.611881.
if region = "NI" ew = 13.090909.
if region = "SB" ew = 286.12069.
if region = "SC" ew = 754.66667.
if region = "SD" ew = 221.02048.
if region = "SF" ew = 370.04839.
if region = "SI" ew = 262.60681.
missing values ew (-9).
variable labels ew "expansion weight for region".
descriptives /variables = ew.
compute rw = ew / 214.7532.
compute rwl = -9.
if region = "CC" & len3 = 1 rwl = 1.2975302.
if region = "CC" & len3 = 2 rwl = .2538129.
if region = "CV" & len3 = 1 rwl = 1.8236741.
if region = "CV" & len3 = 2 rwl =.076382.
if region = "ES" & len3 = 1 rwl = 1.0011309.
if region = "ES" & len3 = 2 rwl = .9457176.
if region = "NC" & len3 = 1 rwl = 1.2013537.
if region = "NC" & len3 = 2 rwl = .2510393.
if region = "NI" & len3 = 1 rwl = .9995734.
if region = "NI" & len3 = 2 rwl = 1.0312444.
if region = "SB" & len3 = 1 rwl = 1.6790632.
if region = "SB" & len3 = 2 rwl = .08950709.
if region = "SC" & len3 = 1 rwl = 1.8707444.
if region = "SC" & len3 = 2 rwl = .1767506.
if region = "SD" & len3 = 1 rwl = 1.6012454.
if region = "SD" & len3 = 2 rwl = .246131.
if region = "SF" & len3 = 1 rwl = 1.608568.
if region = "SF" & len3 = 2 rwl = .2329506.
if region = "SI" & len3 = 1 rwl = 1.5376563.
if region = "SI" & len3 = 2 rwl = .0783033.
missing values rwl (-9).
variable labels rwl "relative weight for length".
compute mainwt = rwl * rw.
variable labels mainwt "weight for length
     and region".
*Weights for multiple boat ownership.
*rescale sample-derived selection weights.
compute ownwt2 = ownrwt / .9481.
compute boatwt2 = boatwt / 1.1189.
variable labels ownwt2 "Selection Weight for
     multiple ownership – owners".
variable labels boatwt2 "Selection Weight for
     multiple ownership – boats".
*multiply these by length and region weights
*compute ownmain = ownwt2 * mainwt.
*compute btmain = boatwt2 * mainwt.
```

Additional Note Concerning Quota Sampling

A sampling plan employing quotas to ensure a uniform distribution of 400 respondents across the two size categories within all ten regions would have yielded 95 percent confidence intervals within 5 percent for each region (for a 50 percent/50 percent proportion) under SRS assumptions, but would also have introduced an inestimable degree of bias from the variability of response rates across strata (some strata would have required greater amounts of sample or contact attempts than others). To the extent this bias could be accounted for through sampling weights, this would also increase the error estimates. Thus, quota sampling is problematic not only because it inflates the potential for error due to nonresponse, but also because it conceals that bias and because it does so in a way that is difficult or impossible to calculate. Probability sampling with quotas is described by Sudman (1976) as valuable for some purposes but "not a method to use for making major policy decisions,"[3] and by Henry (1990) as "a biased sampling technique, although the bias is generally small."[4] Hess (1985) also argues that sampling error is higher for probability samples with quotas.[5] Finally, Kalton (1983) describes the issue thus: "In effect, what a quota sample does is to substitute an alternative respondent for an unavailable or unwilling respondent. As a consequence, although a quota sample produces the required distribution across quota controls, it underrepresents persons who are difficult to contact or who are reluctant to participate in the survey."[6] Although adding additional sample or contact attempts to a probability sample is not as problematic as an entirely quota-based sample, it creates the same problems. PRI recommends against the use of such methods for the California Boater Needs Survey.

Appendix A6
California Boater Surveys

- PRI Computer Aided Boater Interview System Questionaire
- Boater Callback Telephone Survey

[3] Sudman, S. (1976). Applied Sampling. New York: Academic Press, p. 200.
[4] Henry, G.T. (1990). Practical Sampling. Newbury Park, CA: Sage Publications, p. 23.
[5] Hess, I. (1985). Sampling for Social Research Surveys. Ann Arbor, MI: University of Michigan.
[6] Kalton, G. (1983). Introduction to Survey Sampling. Newbury Park, CA: Sage Publications, p. 93.

*** QUESTION #1 ***
Hello, may I speak with [2]##?
GO TO Q. #156 ====> <1> YES
DISP CODE #9 ====> <2> NO, PERSON NOT AVAILABLE
DISP CODE #9 ====> <3> SCHEDULE CALLBACK
DISP CODE #1 ====> <4> NO ANSWER
DISP CODE #2 ====> <5> PHONE BUSY
DISP CODE #11 ====> <6> ANSWERING MACHINE
DISP CODE #13 ====> <7> HANG UP/HARD REFUSAL
DISP CODE #10 ====> <8> CALL SUBSTITUTE NUMBER
DISP CODE #4 ====> <9> BUSINESS/GOVERNMENT NUMBER
DISP CODE #3 ====> <10> DISCONNECTED NUMBER
DISP CODE #7 ====> <11> COMPUTER/FAX TONE
GO TO Q. #159 ====> <12> PERSON DOES NOT LIVE HERE ANYMORE

*** QUESTION #2 ***
We have your boat listed as a [3]## foot
[4]## boat.
Is this correct? .
{30}(USE THE FOLLOWING INFORMATION FOR VERIFICATION IF NEEDED)
{30} MAKE: [6]##
{30} VESSEL: [7]##
{30} LICENSE: [8]##
{30} OFFICIAL: [9]##
GO TO Q. #4 ====> <1> YES
GO TO Q. #6 ====> <2> NO

*** QUESTION #3 ***
Do you have a different boat?
GO TO Q. #158 ====> <1> YES
GO TO Q. #6 ====> <2> NO

*** QUESTION #4 ***
Do you own any other boats?
GO TO Q. #5 ====> <1> YES
GO TO Q. #7 ====> <2> NO

*** QUESTION #5 ***
How many others?
GO TO Q. #7 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 0 --
-- ANSWER REQUIRED --

*** QUESTION #6 ***
Thank you. We're only calling about specific boats.
Thank you for your time. Good afternoon / Good evening.
DISP CODE #1 ====> <1> text
-- TEXT SCREEN --

*** QUESTION #7 ***
Did you own your [3]## foot
[4]## boat for at least six months in the year 2000?
GO TO Q. #9 ====> <1> YES
GO TO Q. #8 ====> <2> NO

*** QUESTION #8 ***
We've been asked to interview people who have owned their boat for
6 months or more. Thank you for your help. {29} SAY GOODBYE.
DISP CODE #17 ====> <1> text
-- TEXT SCREEN --

*** QUESTION #9 ***
How long have you owned this boat?
{30}(INTERVIEWER ENTER YEARS ONLY; ROUND TO NEAREST YEAR)
GO TO Q. #13 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 1 THRU 100 --
-- ANSWER REQUIRED --

*** QUESTION #10 ***
*IS THIS VALUE (LENGTH) GREATER THAN OR EQUAL TO 20?
[3]##
GO TO Q. #11 ====> <1> [3]##
-- NUMERIC OPEN END - RANGE IS 0 THRU 19 --
-- NO ANSWER REQUIRED --

```
*** QUESTION #11 ***
   << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
    IF Q#10 EQ 0 TO 19                          (CONDITIONAL #1)
   THEN GO TO Q.#14 ELSE GO TO Q.#11.
How many feet wide is this boat?
{30}(INTERVIEWER: ROUND TO NEAREST FOOT)
{30}(INTERVIEWER: IF "DON'T KNOW" ENTER "888.")
  GO TO Q. #12  ====>  <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 1 THRU 1000 --
-- ANSWER REQUIRED --

*** QUESTION #12 ***
How many feet deep is it below the water line?
{30}(INTERVIEWER ENTER FEET;ROUND TO NEAREST FOOT)
{30}(INTERVIEWER:IF "DON'T KNOW" ENTER "888.")
  GO TO Q. #13  ====>  <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 1 THRU 500 --
-- ANSWER REQUIRED --

*** QUESTION #13 ***
Is this a single or multi-hull boat?
  GO TO Q. #14  ====>  <1> SINGLE
  GO TO Q. #14  ====>  <2> MULTI-HULL

*** QUESTION #14 ***
Now I'm going to be asking a series of questions about how
you used your boat in the year 2000.
  GO TO Q. #15  ====>  <1> TEXT
-- TEXT SCREEN --

*** QUESTION #15 ***
What months of the year 2000 did you use this boat?
{30}[INTERVIEWER NOTE: "USING" THE BOAT IS DEFINED AS BEING ON BOARD
{30}THE BOAT, ON THE WATER, FOR LEISURE OR WORK ACTIVITIES.
{30}IT DOES NOT INCLUDE BEING ON BOARD THE BOAT EXCLUSIVELY FOR
{30}MAINTENANCE ACTIVITIES.](INTERVIEWER CHECK ALL RESPONSES)
  GO TO Q. #16  ====>  <1> ALL YEAR
  GO TO Q. #16  ====>  <2> JANUARY
  GO TO Q. #16  ====>  <3> FEBRUARY
  GO TO Q. #16  ====>  <4> MARCH
  GO TO Q. #16  ====>  <5> APRIL
  GO TO Q. #16  ====>  <6> MAY
  GO TO Q. #16  ====>  <7> JUNE
  GO TO Q. #16  ====>  <8> JULY
  GO TO Q. #16  ====>  <9> AUGUST
  GO TO Q. #16  ====>  <10> SEPTEMBER
  GO TO Q. #16  ====>  <11> OCTOBER
  GO TO Q. #16  ====>  <12> NOVEMBER
  GO TO Q. #16  ====>  <13> DECEMBER
-- MULTI-PUNCH --

*** QUESTION #16 ***
Where do you usually store this boat during those months? {30} (IF
{30}REPONDENT SAYS HE/SHE HAS MORE THAN ONE PLACE, EMPHASIZE USALLY)
What is the site name?
  GO TO Q. #17  ====>  <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #17 ***
In what city or county is that located?
{30}(NOTE: MAY ANSWER EITHER CITY OR COUNTY, DO NOT NEED BOTH.)
  GO TO Q. #18  ====>  <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #18 ***
What type of facility is this? Is it a...
  GO TO Q. #20  ====>  <1> a boating facility
  GO TO Q. #20  ====>  <2> another storage facility {29}RV STORAGE, ETC
  GO TO Q. #20  ====>  <3> your own property
  GO TO Q. #20  ====>  <4> other {SPECIFY)
 -- ABOVE ANSWER ASSOCIATED WITH OPEN END QUESTION #19 --

*** QUESTION #19 ***
Other
  GO TO Q. #20  ====>  <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED -
```

*** QUESTION #20 ***
Is this boat stored...
  GO TO Q. #23 ====> <1> on the water
  GO TO Q. #21 ====> <2> on a trailer
  GO TO Q. #21 ====> <3> on a rack
  GO TO Q. #21 ====> <4> on the ground

*** QUESTION #21 ***
How do you usually launch your boat?{30}(INTERVIEWER CHECK
{30}ALL THAT APPLY)
  GO TO Q. #23 ====> <1> a trailer on a launch ramp
  GO TO Q. #23 ====> <2> hoist
  GO TO Q. #23 ====> <3> launching service
  GO TO Q. #23 ====> <4> carry it down to the water
  GO TO Q. #23 ====> <5> OTHER (SPECIFY)
 -- ABOVE ANSWER ASSOCIATED WITH OPEN END QUESTION #22 --
-- MULTI-PUNCH --

*** QUESTION #22 ***
Other
  GO TO Q. #23 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #23 ***
Is the location where you store your boat covered or open?
  GO TO Q. #24 ====> <1> COVERED
  GO TO Q. #24 ====> <2> OPEN

*** QUESTION #24 ***
Is this your preferred place to store this boat during those months?
  GO TO Q. #28 ====> <1> YES
  GO TO Q. #28 ====> <2> NO
 -- ABOVE ANSWER ASSOCIATED WITH OPEN END QUESTION #25 --

*** QUESTION #25 ***
Why not?
  GO TO Q. #28 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #26 ***
*Are there other locations where you stored this boat for periods of one month or more in 2000?
  GO TO Q. #27 ====> <1> YES
  GO TO Q. #52 ====> <2> NO

*** QUESTION #27 ***
* How many other locations?
  GO TO Q. #28 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 1 THRU 100 --
-- ANSWER REQUIRED --

*** QUESTION #28 ***
Is there a second place you stored your boat during 2000?
  GO TO Q. #29 ====> <1> YES
  GO TO Q. #52 ====> <2> NO

*** QUESTION #29 ***
What is the name of the location where you stored your boat the second longest in the year 2000?
  GO TO Q. #30 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #30 ***
In what city or county is that located? {30}(NOTE: MAY ANSWER EITHER
{30} CITY OR COUNTY, DO NOT NEED BOTH)
  GO TO Q. #31 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #31 ***
What months of 2000 did you store your boat at [Q29]##.
{30}(INTERVIEWER CHECK ALL THAT APPLY)
  GO TO Q. #32 ====> <1> ALL YEAR
  GO TO Q. #32 ====> <2> JANUARY
  GO TO Q. #32 ====> <3> FEBRUARY
  GO TO Q. #32 ====> <4> MARCH
  GO TO Q. #32 ====> <5> APRIL
  GO TO Q. #32 ====> <6> MAY
  GO TO Q. #32 ====> <7> JUNE
  GO TO Q. #32 ====> <8> JULY

```
  GO TO Q. #32  ====>  <9> AUGUST
  GO TO Q. #32  ====>  <10> SEPTEMBER
  GO TO Q. #32  ====>  <11> OCTOBER
  GO TO Q. #32  ====>  <12> NOVEMBER
  GO TO Q. #32  ====>  <13> DECEMBER
-- MULTI-PUNCH --

*** QUESTION #32 ***
What type of facility is this?
  GO TO Q. #34  ====>  <1> a boating facility
  GO TO Q. #34  ====>  <2> another storage facility (rv storage, etc.)
  GO TO Q. #34  ====>  <3> your own property
  GO TO Q. #34  ====>  <4> other (specify)
 -- ABOVE ANSWER ASSOCIATED WITH OPEN END QUESTION #33 --

*** QUESTION #33 ***
Other
  GO TO Q. #34  ====>  <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #34 ***
Is this boat stored...
  GO TO Q. #37  ====>  <1> on the water
  GO TO Q. #35  ====>  <2> on a trailer
  GO TO Q. #35  ====>  <3> on a rack
  GO TO Q. #35  ====>  <4> on the ground

*** QUESTION #35 ***
How do you usually launch you boat when it is stored at [Q29]##
{30}(INTERVIEWER CHECK ALL THAT APPLIES)
  GO TO Q. #37  ====>  <1> a trailer on a launch ramp
  GO TO Q. #37  ====>  <2> hoist
  GO TO Q. #37  ====>  <3> launching service
  GO TO Q. #37  ====>  <4> carry it down to the water
  GO TO Q. #37  ====>  <5> OTHER (SPECIFY)
 -- ABOVE ANSWER ASSOCIATED WITH OPEN END QUESTION #36 --
-- MULTI-PUNCH --

*** QUESTION #36 ***
Other
  GO TO Q. #37  ====>  <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #37 ***
Is this location...
  GO TO Q. #38  ====>  <1> covered
  GO TO Q. #38  ====>  <2> open

*** QUESTION #38 ***
 Is this your preferred place to store this boat during those months?
  GO TO Q. #52  ====>  <1> YES
  GO TO Q. #39  ====>  <2> NO
 -- ABOVE ANSWER ASSOCIATED WITH OPEN END QUESTION #39 --

*** QUESTION #39 ***
Why not?
  GO TO Q. #52  ====>  <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #40 ***
*Is there a third place you stored your boat during 2000?
  GO TO Q. #41  ====>  <1> YES
  GO TO Q. #52  ====>  <2> NO

*** QUESTION #41 ***
*What is the name of the third place you stored your boat during 2000?
  GO TO Q. #42  ====>  <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #42 ***
*In what city or county is this located? {30}(NOTE: MAY ANSWER EITHER
{30} CITY OR COUNTY, DO NOT NEED BOTH)
  GO TO Q. #43  ====>  <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --
```

*** QUESTION #43 ***
*What months of 2000 did you store your boat at [Q41]##.
{30}(INTERVIEWER CHECK ALL THAT APPLY)
  GO TO Q. #44 ====> <1> ALL YEAR
  GO TO Q. #44 ====> <2> JANUARY
  GO TO Q. #44 ====> <3> FEBRUARY
  GO TO Q. #44 ====> <4> MARCH
  GO TO Q. #44 ====> <5> APRIL
  GO TO Q. #44 ====> <6> MAY
  GO TO Q. #44 ====> <7> JUNE
  GO TO Q. #44 ====> <8> JULY
  GO TO Q. #44 ====> <9> AUGUST
  GO TO Q. #44 ====> <10> SEPTEMBER
  GO TO Q. #44 ====> <11> OCTOBER
  GO TO Q. #44 ====> <12> NOVEMBER
  GO TO Q. #44 ====> <13> DECEMBER
-- MULTI-PUNCH --

*** QUESTION #44 ***
*What type of facility is this?
  GO TO Q. #46 ====> <1> a boating facility
  GO TO Q. #46 ====> <2> another storage facility (rv storage, etc.)
  GO TO Q. #46 ====> <3> your own property
  GO TO Q. #46 ====> <4> other (specify)
 -- ABOVE ANSWER ASSOCIATED WITH OPEN END QUESTION #45 --

*** QUESTION #45 ***
*Other
  GO TO Q. #46 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #46 ***
*Is this boat stored...
  GO TO Q. #49 ====> <1> on the water
  GO TO Q. #47 ====> <2> on a trailer
  GO TO Q. #47 ====> <3> on a rack
  GO TO Q. #47 ====> <4> on the ground

*** QUESTION #47 ***
*How do you usually put your boat in the water when it is stored at
[Q41]## .
{30}(INTERVIEWER CHECK THAT APPLIES)
  GO TO Q. #49 ====> <1> a trailer on a launch ramp
  GO TO Q. #49 ====> <2> hoist
  GO TO Q. #49 ====> <3> launching service
  GO TO Q. #49 ====> <4> carry it down to the water
  GO TO Q. #49 ====> <5> other (specify)
 -- ABOVE ANSWER ASSOCIATED WITH OPEN END QUESTION #48 --
-- MULTI-PUNCH --

*** QUESTION #48 ***
*Other
  GO TO Q. #49 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #49 ***
*Is this storage location...
  GO TO Q. #50 ====> <1> covered
  GO TO Q. #50 ====> <2> open

*** QUESTION #50 ***
*Is this your preferred place to store this boat during those months?
  GO TO Q. #52 ====> <1> YES
  GO TO Q. #52 ====> <2> NO
 -- ABOVE ANSWER ASSOCIATED WITH OPEN END QUESTION #51 --
*** QUESTION #51 ***
*Why not?
  GO TO Q. #52 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #52 ***
Now I have some questions about the one or two places you boat most often.
  GO TO Q. #53 ====> <1> TEXT
-- TEXT SCREEN --

*** QUESTION #53 ***
What is the name of the waterway where you use this boat most often?
  GO TO Q. #54 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #54 ***
Why do you boat at [Q53]##?
(list up to two reasons){30} REASON 1
  GO TO Q. #55 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #55 ***
{30}WHY DO YOU BOAT AT [Q53]##?
{30}REASON 2 (IF ONLY ONE REASON LEAVE BLANK)
  GO TO Q. #56 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #56 ***
Have you had any problems at [Q53]##?
{30} (LIST UP TO TWO PROBLEMS)PROBLEM 1
  GO TO Q. #57 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #57 ***
{30}HAVE YOU HAD ANY PROBLEMS AT [Q53]##?
{30}(LIST UP TO TWO PROBLEMS) PROBLEM 2
  GO TO Q. #58 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #58 ***
Do you think this location has any facility needs, such as repairs,
replacement, expansion, or additions?{30}(LIST UP TO TWO FACILITY NEEDS)
{30} FACILITY NEEDS 1
  GO TO Q. #59 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #59 ***
{30}DO YOU THINK THIS LOCATION HAS ANY FACILITY NEEDS, SUCH AS REPAIRS,
{30}REPLACEMENT, EXPANSION, OR ADDITIONS? (LIST UP TO TWO FACILITY
{30}NEEDS)FACILITY NEEDS 2
  GO TO Q. #60 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #60 ***
   << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
    IF Q#20 EQ CODE(S) 2-4   (CONDITIONAL #2)
   THEN GO TO Q.#60 ELSE GO TO Q.#64.
Now I'm going to ask you to consider 3 hypothetical questions about access to [Q53]##.
Your answers will help estimate the benefits of proposed boating access projects.
We are using [Q53]## as an example only because we know you are familiar with it. So first...
  GO TO Q. #61 ====> <1> TEXT
-- TEXT SCREEN --

*** QUESTION #61 ***
If all access to [Q53]##
was subject to daily boating user fee, how
much would you be willing to pay per person, per day, to use this
waterway? {30}(INTERVIEWER: IF RESPONDENT DOES NOT KNOW ENTER "888.")
  GO TO Q. #62 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 90000000 --
-- ANSWER REQUIRED --

*** QUESTION #62 ***
If [Q53]##
was no longer accessible to you, how many miles would
you be willing to travel to access another waterway? {30} (INTERVIEWER:
{30}IF RESPONDENT DOES NOT KNOW, ENTER "888.")
  GO TO Q. #63 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 90000000 --
-- ANSWER REQUIRED --

*** QUESTION #63 ***
If [Q53]##
was no longer accessible to you, what lump sum payment
would compensate you individually for this loss of access?
{30}(INTERVIEWER: IF RESPONDENT DOES NOT KNOW ENTER "888.")
  GO TO Q. #64 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 90000000 --
-- ANSWER REQUIRED --

*** QUESTION #64 ***
Is there another waterway where you frequently use the boat?
  GO TO Q. #65 ====> <1> YES
  GO TO Q. #74 ====> <2> NO

*** QUESTION #65 ***
What is the name of the waterway?
  GO TO Q. #66 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #66 ***
Why do you boat at [Q65]##?
{30}(LIST UP TO TWO REASONS) REASON 1
  GO TO Q. #67 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #67 ***
{30}WHY DO YOU BOAT AT [Q65]##? REASON 2
  GO TO Q. #68 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #68 ***
Have you had any problems at [Q65]##?
  GO TO Q. #69 ====> <1> YES
  GO TO Q. #71 ====> <2> NO

*** QUESTION #69 ***
{30}HAVE YOU HAD ANY PROBLEMS AT [Q65]##?
{30}(LIST UP TO TWO PROBLEMS) PROBLEM 1

GO TO Q. #70 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #70 ***
{30}ARE THERE ANY PROBLEMS AT [Q65]##?
{30}(LIST UP TO TWO PROBLEMS) PROBLEM 2
  GO TO Q. #71 ====> <1> SPECIFY
-- MULTI-PUNCH --

-- ANSWER REQUIRED --

*** QUESTION #71 ***
Do you think this location has any facility needs, such as repairs,
replacement, expansion, or additions?
  GO TO Q. #72 ====> <1> YES
  GO TO Q. #74 ====> <2> NO

*** QUESTION #72 ***
DO YOU THINK THIS LOCATION HAS ANY FACILITY NEEDS, SUCH AS REPAIRS,
REPLACEMENT, EXPANSION, OR ADDITIONS? {30}(LIST UP TO TWO FACILITY
{30}NEEDS)FACILITY NEEDS 1
  GO TO Q. #73 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #73 ***
{30}DO YOU THINK THIS LOCATION HAS ANY FACILITY NEEDS, SUCH AS REPAIRS,
{30}REPLACEMENT, EXPANSION, OR ADDITIONS? (LIST UP TO TWO FACILITY
{30}NEEDS)FACILITY NEEDS 2
  GO TO Q. #74 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #74 ***
*Now I have few questions about improvements to other California waterways.
  GO TO Q. #75 ====> <1> TEXT
-- TEXT SCREEN --

*** QUESTION #75 ***
Now I have few questions about improvements to other California waterways.
Are there waterways in California you would like to use more for boating if they were improved in some way?
  GO TO Q. #76 ====> <1> YES
  GO TO Q. #124 ====> <2> NO

*** QUESTION #76 ***
What is the name of a waterway you would like to use more?
  GO TO Q. #77 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #77 ***
In what city or county is it located?
  GO TO Q. #78 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #78 ***
What is the main reason you don't use this waterway?
  GO TO Q. #79 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #79 ***
What are your recommendations for changes or improvements that would make this waterway a better place to boat?
{30}(LIST UP TO TWO)
{30}RECOMMENDATION 1
  GO TO Q. #80 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #80 ***
{30}WHAT ARE YOUR RECOMMENDATIONS FOR CHANGES OR IMPROVEMENTS THAT
{30}WOULD MAKE THIS WATERWAY A BETTER PLACE TO BOAT? (LIST UP TO TWO)
{30}RECOMMNEDATION 2
  GO TO Q. #81 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #81 ***
Is there another waterway you would use more if it were improved in some way?
  GO TO Q. #82 ====> <1> YES
  GO TO Q. #124 ====> <2> NO

*** QUESTION #82 ***
What is the name of the waterway?
  GO TO Q. #83 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #83 ***
In what city or county is it located?
  GO TO Q. #84 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #84 ***
What is the main reason you don't use this waterway?
  GO TO Q. #85 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #85 ***
What are your recommendations for changes or improvements that would
make this waterway a better place to boat? {30}(LIST UP TO TWO)
{30}RECOMMENDATION 1
  GO TO Q. #86 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #86 ***
{30}WHAT ARE YOUR RECOMMENDATIONS FOR CHANGES OR IMPROVEMENTS THAT WOULD
{30}MAKE THIS WATERWAY A BETTER PLACE TO BOAT? (LIST UP TO TWO)
{30}RECOMMENDATION 2
 GO TO Q. #124 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #87 ***
How many boating trips in 2000 were to places more than 100 miles from where you live?
  GO TO Q. #101 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 999 --
-- ANSWER REQUIRED --

*** QUESTION #88 ***
*When planning boating trips during year 2000, did you use information from any of the following sources?
Newspaper or magazine ads?
  GO TO Q. #101 ====> <1> YES
  GO TO Q. #101 ====> <2> NO

*** QUESTION #89 ***
*{30}WHEN PLANNING BOATING TRIPS DURRING YEAR 2000, DID YOU USE
{30}INFORMATION FROM ANY OF THE FOLLOWING SOURCES?
TV or radio ad?
  GO TO Q. #101 ====> <1> YES
  GO TO Q. #90 ====> <2> NO

*** QUESTION #90 ***
*{30}WHEN PLANNING BOATING TRIPS DURRING YEAR 2000, DID YOU USE
{30}INFORMATION FROM ANY OF THE FOLLOWING SOURCES?
Feature article in magazine or newspaper?
  GO TO Q. #101 ====> <1> YES
  GO TO Q. #91 ====> <2> NO

*** QUESTION #91 ***
*{30}WHEN PLANNING BOATING TRIPS DURRING YEAR 2000, DID YOU USE
{30}INFORMATION FROM ANY OF THE FOLLOWING SOURCES?
Local chamber of commerce or visitor bureau?
  GO TO Q. #101 ====> <1> YES
  GO TO Q. #92 ====> <2> NO

*** QUESTION #92 ***
*{30}WHEN PLANNING BOATING TRIPS DURRING YEAR 2000, DID YOU USE
{30}INFORMATION FROM ANY OF THE FOLLOWING SOURCES?
Boat, RV or sport show?
  GO TO Q. #101 ====> <1> YES
  GO TO Q. #93 ====> <2> NO

*** QUESTION #93 ***
*{30}WHEN PLANNING BOATING TRIPS DURRING YEAR 2000, DID YOU USE
{30}INFORMATION FROM ANY OF THE FOLLOWING SOURCES?
Commercial guidebook?
  GO TO Q. #101 ====> <1> YES
  GO TO Q. #94 ====> <2> NO

*** QUESTION #94 ***
*{30}WHEN PLANNING BOATING TRIPS DURRING YEAR 2000, DID YOU USE
{30}INFORMATION FROM ANY OF THE FOLLOWING SOURCES?
Automobile/travel club
  GO TO Q. #101 ====> <1> YES
  GO TO Q. #95 ====> <2> NO

*** QUESTION #95 ***
*{30}WHEN PLANNING BOATING TRIPS DURRING YEAR 2000, DID YOU USE
{30}INFORMATION FROM ANY OF THE FOLLOWING SOURCES?
Friends/relatives?
  GO TO Q. #101 ====> <1> YES
  GO TO Q. #96 ====> <2> NO

*** QUESTION #96 ***
*{30}WHEN PLANNING BOATING TRIPS DURRING YEAR 2000, DID YOU USE
{30}INFORMATION FROM ANY OF THE FOLLOWING SOURCES?
Personal knowledge?
  GO TO Q. #101 ====> <1> YES
  GO TO Q. #97 ====> <2> NO

*** QUESTION #97 ***
*{30}WHEN PLANNING BOATING TRIPS DURRING YEAR 2000, DID YOU USE
{30}INFORMATION FROM ANY OF THE FOLLOWING SOURCES? Internet?
  GO TO Q. #101 ====> <1> YES
  GO TO Q. #98 ====> <2> NO

*** QUESTION #98 ***
*{30}WHEN PLANNING BOATING TRIPS DURRING YEAR 2000, DID YOU USE
{30}INFORMATION FROM ANY OF THE FOLLOWING SOURCES? Government office?
  GO TO Q. #101 ====> <1> YES
  GO TO Q. #99 ====> <2> NO

*** QUESTION #99 ***
*{30}WHEN PLANNING BOATING TRIPS DURRING YEAR 2000, DID YOU USE
{30}INFORMATION FROM ANY OF THE FOLLOWING SOURCES?
Are there any other sources you use?
  GO TO Q. #101 ====> <1> YES
 -- ABOVE ANSWER ASSOCIATED WITH OPEN END QUESTION #100 --
  GO TO Q. #101 ====> <2> NO

*** QUESTION #100 ***
*Please specify.
  GO TO Q. #101 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #101 ***
Now I am going to ask a series of questions about a TYPICAL TRIP with this boat during the year 2000.
  GO TO Q. #102 ====> <1> TEXT
-- TEXT SCREEN --

*** QUESTION #102 ***
How many days long was this typical trip? {30}(INTERVIEWER: IF LESS
{30}THAN ONE DAY ENTER 1; IF REFUSE TO ANSWER ENTER "999".)
  GO TO Q. #103 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 1 THRU 999 --
-- ANSWER REQUIRED --

*** QUESTION #103 ***
How many people were aboard in all? {30}(INTERVIEWER: IF REFUSE TO
{30}ANSWER ENTER "999.")
  GO TO Q. #104 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 1 THRU 1000 --
-- ANSWER REQUIRED --

*** QUESTION #104 ***
Did you use a launching facility on this trip?
  GO TO Q. #105 ====> <1> YES
  GO TO Q. #105 ====> <2> NO

*** QUESTION #105 ***
Now please think about how much money you spent on this typical boating trip. I'm going to read a
list of things boaters often spend money on; for each one please tell me how much you and your immediate
traveling party spent per day. First, how much did you spend per day in grocery and convenience stores?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #106 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000 --
-- ANSWER REQUIRED --

*** QUESTION #106 ***
{30}NOW THINK ABOUT HOW MUCH MONEY YOU SPENT ON THIS TYPICAL BOATING
{30}TRIP. I'M GOING TO READ A LIST OF THINGS BOATERS OFTEN SPEND MONEY
{30}ON; FOR EACH ONE PLEASE TELL ME HOW MUCH YOU AND YOUR IMMEDIATE
{30}TRAVELING PARTY SPENT PER DAY. FIRST, HOW MUCH DID YOU SPEND PER DAY.
In restaurants? {30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T
{30}KNOW ENTER "888.")
  GO TO Q. #107 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000 --
-- ANSWER REQUIRED --

*** QUESTION #107 ***
{30}NOW THINK ABOUT HOW MUCH MONEY YOU SPENT ON THIS TYPICAL BOATING
{30}TRIP. I'M GOING TO READ A LIST OF THINGS BOATERS OFTEN SPEND MONEY
{30}ON; FOR EACH ONE PLEASE TELL ME HOW MUCH YOU AND YOUR IMMEDIATE
{30}TRAVELING PARTY SPENT PER DAY. FIRST, HOW MUCH DID YOU SPEND PER DAY.
In hotels and motels? {30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T
{30}KNOW ENTER "888.")
  GO TO Q. #108 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000 --
-- ANSWER REQUIRED --

*** QUESTION #108 ***
{30}NOW THINK ABOUT HOW MUCH MONEY YOU SPENT ON THIS TYPICAL BOATING
{30}TRIP. I'M GOING TO READ A LIST OF THINGS BOATERS OFTEN SPEND MONEY
{30}ON; FOR EACH ONE PLEASE TELL ME HOW MUCH YOU AND YOUR IMMEDIATE
{30}TRAVELING PARTY SPENT PER DAY. FIRST, HOW MUCH DID YOU SPEND PER DAY.
In campgrounds? {30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T
{30}KNOW ENTER "888.")
  GO TO Q. #109 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000 --
-- ANSWER REQUIRED --

*** QUESTION #109 ***
{30}NOW THINK ABOUT HOW MUCH MONEY YOU SPENT ON THIS TYPICAL BOATING
{30}TRIP. I'M GOING TO READ A LIST OF THINGS BOATERS OFTEN SPEND MONEY
{30}ON; FOR EACH ONE PLEASE TELL ME HOW MUCH YOU AND YOUR IMMEDIATE
{30}TRAVELING PARTY SPENT PER DAY. FIRST, HOW MUCH DID YOU SPEND PER DAY .
In gift, book, souvenir or other retail shops?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #110 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000 --
-- ANSWER REQUIRED --

*** QUESTION #110 ***
{30}NOW THINK ABOUT HOW MUCH MONEY YOU SPENT ON THIS TYPICAL BOATING
{30}TRIP. I'M GOING TO READ A LIST OF THINGS BOATERS OFTEN SPEND MONEY
{30}ON; FOR EACH ONE PLEASE TELL ME HOW MUCH YOU AND YOUR IMMEDIATE
{30}TRAVELING PARTY SPENT PER DAY. FIRST, HOW MUCH DID YOU SPEND PER DAY .
In drug stores? {30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T
{30}KNOW ENTER "888.")
  GO TO Q. #111 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000 --
-- ANSWER REQUIRED --

*** QUESTION #111 ***
{30}NOW THINK ABOUT HOW MUCH MONEY YOU SPENT ON THIS TYPICAL BOATING
{30}TRIP. I'M GOING TO READ A LIST OF THINGS BOATERS OFTEN SPEND MONEY
{30}ON; FOR EACH ONE PLEASE TELL ME HOW MUCH YOU AND YOUR IMMEDIATE
{30}TRAVELING PARTY SPENT PER DAY. FIRST, HOW MUCH DID YOU SPEND PER DAY .
In boating equipment stores? {30}(INTERVIEWER: ENTER DOLLAR AMOUNT;
{30}IF DON'T KNOW ENTER "888.")
  GO TO Q. #112 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 0 --
-- ANSWER REQUIRED --

*** QUESTION #112 ***
{30}NOW THINK ABOUT HOW MUCH MONEY YOU SPENT ON THIS TYPICAL BOATING
{30}TRIP. I'M GOING TO READ A LIST OF THINGS BOATERS OFTEN SPEND MONEY
{30}ON; FOR EACH ONE PLEASE TELL ME HOW MUCH YOU AND YOUR IMMEDIATE
{30}TRAVELING PARTY SPENT PER DAY. FIRST, HOW MUCH DID YOU SPEND PER DAY .
In gasoline stations for boat fuel? {30}(INTERVIEWER: ENTER DOLLAR
{30}AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #113 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000 --
-- ANSWER REQUIRED --

*** QUESTION #113 ***
{30}NOW THINK ABOUT HOW MUCH MONEY YOU SPENT ON THIS TYPICAL BOATING
{30}TRIP. I'M GOING TO READ A LIST OF THINGS BOATERS OFTEN SPEND MONEY
{30}ON; FOR EACH ONE PLEASE TELL ME HOW MUCH YOU AND YOUR IMMEDIATE
{30}TRAVELING PARTY SPENT PER DAY. FIRST, HOW MUCH DID YOU SPEND PER DAY .
In gasoline stations for auto or truck fuel?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #115 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000 --
-- ANSWER REQUIRED --

*** QUESTION #114 ***
*{30}NOW THINK ABOUT HOW MUCH MONEY YOU SPENT ON THIS TYPICAL BOATING
{30}TRIP. I'M GOING TO READ A LIST OF THINGS BOATERS OFTEN SPEND MONEY
{30}ON; FOR EACH ONE PLEASE TELL ME HOW MUCH YOU AND YOUR IMMEDIATE
{30}TRAVELING PARTY SPENT PER DAY. FIRST, HOW MUCH DID YOU SPEND PER DAY .
Amount paid to the crew? {30}(INTERVIEWER: ENTER DOLLAR
{30}AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #115 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000 --
-- ANSWER REQUIRED --

*** QUESTION #115 ***
Now I'm going to be asking about seven types of expenses specifically at marinas and boating facilities,
again during a typical trip. How much do you spend per day at marinas and boating facilities for Transient
slip or tie up fees?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #116 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000 --
-- ANSWER REQUIRED --

*** QUESTION #116 ***
{30}HOW MUCH DO YOU SPEND PER DAY AT MARINAS AND BOATING FACILITIES FOR Parking fees?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #117 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000 --
-- ANSWER REQUIRED --

*** QUESTION #117 ***
{30}HOW MUCH DO YOU SPEND PER DAY AT MARINAS AND BOATING FACILITIES FOR Launching fees and services?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #118 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000 --
-- ANSWER REQUIRED --

*** QUESTION #118 ***
{30}HOW MUCH DO YOU SPEND PER DAY AT MARINAS AND BOATING FACILITIES FOR Boat fuel?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #119 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000 --
-- ANSWER REQUIRED --

*** QUESTION #119 ***
{30}HOW MUCH DO YOU SPEND PER DAY AT MARINAS AND BOATING FACILITIES FOR Boat or motor rental?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #120 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000 --
-- ANSWER REQUIRED --

*** QUESTION #120 ***
{30}HOW MUCH DO YOU SPEND PER DAY AT MARINAS AND BOATING FACILITIES FOR Gear and equipment rental fee?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")

  GO TO Q. #121 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000 --
-- ANSWER REQUIRED --

*** QUESTION #121 ***
{30}HOW MUCH DO YOU SPEND PER DAY AT MARINAS AND BOATING FACILITIES FOR Incidentals or Other Items?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #125 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000 --
-- ANSWER REQUIRED --

*** QUESTION #122 ***
*Finally is there anything else you spent money on during this typical boat trip?
  GO TO Q. #123 ====> <1> YES
 -- RANGE IS 0 THRU 0 --
  GO TO Q. #124 ====> <2> NO
 -- RANGE IS 0 THRU 0 --
-- MULTI-PUNCH --
-- NUMERIC CLOSED END --

*** QUESTION #123 ***
*Please specify?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #124 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 0 --
-- ANSWER REQUIRED --

*** QUESTION #124 ***
How many times did you take boating trips in the year 2000?
{30}(INTERVIEWER:IF REFUSE TO ANSWER ENTER "999.")
  GO TO Q. #87 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000 --
-- ANSWER REQUIRED --

*** QUESTION #125 ***
Thank you. Now please think about the annual costs of owning and maintaining this boat, other than money spent on boat trips. Again, this information is completely confidential, but the aggregate results will be very helpful in demonstrating the benefits of boating to the state economy.
  GO TO Q. #126 ====> <1> TEXT
-- TEXT SCREEN --

*** QUESTION #126 ***
.During the year 2000, how much did you spend on Equipment purchases?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #127 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 100000 --
-- ANSWER REQUIRED --

*** QUESTION #127 ***
{30}DURING THE YEAR 2000, WHAT DID THIS BOAT AND ITS EQUIPMENT (SUCH AS
{30}MOTOR, TRAILER AND HAULING VEHICLE) COST TO OWN AND MAINTAIN?.
{30}DURING THE YEAR 2000, HOW MUCH DID YOU SPEND ON Repair and maintenance?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #128 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 100000 --
-- ANSWER REQUIRED --

*** QUESTION #128 ***
{30}DURING THE YEAR 2000, WHAT DID THIS BOAT AND ITS EQUIPMENT (SUCH AS
{30}MOTOR, TRAILER AND HAULING VEHICLE) COST TO OWN AND MAINTAIN? .
{30}DURING THE YEAR 2000, HOW MUCH DID YOU SPEND ON Insurance?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #129 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 100000 --
-- ANSWER REQUIRED --

*** QUESTION #129 ***
{30}DURING THE YEAR 2000, WHAT DID THIS BOAT AND ITS EQUIPMENT (SUCH AS
{30}MOTOR, TRAILER AND HAULING VEHICLE) COST TO OWN AND MAINTAIN? .
{30}DURING THE YEAR 2000, HOW MUCH DID YOU SPEND ON... Property Taxes on the boat?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #130 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 100000 --
-- ANSWER REQUIRED --

*** QUESTION #130 ***
{30}DURING THE YEAR 2000, WHAT DID THIS BOAT AND ITS EQUIPMENT (SUCH AS
{30}MOTOR, TRAILER AND HAULING VEHICLE) COST TO OWN AND MAINTAIN? .
{30}DURING THE YEAR 2000, HOW MUCH DID YOU SPEND ON Marina slip PER MONTH?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT, ENTER "0" IF NONE)
{30) (INTERVIEWER; IF DON'T KNOW ENTER "888.")
  GO TO Q. #131 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 100000 --
-- ANSWER REQUIRED --

*** QUESTION #131 ***
   << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
    IF Q#130 EQ 0 TO 0   (CONDITIONAL #3)
   THEN GO TO Q.#132 ELSE GO TO Q.#131.
How many months of the year did you pay for a marina slip?
  GO TO Q. #132 ====> <1> One Month
  GO TO Q. #132 ====> <2> Two Months
  GO TO Q. #132 ====> <3> Three Months
  GO TO Q. #132 ====> <4> Four Months
  GO TO Q. #132 ====> <5> Five Months
  GO TO Q. #132 ====> <6> Six Months
  GO TO Q. #132 ====> <7> Seven Months
  GO TO Q. #132 ====> <8> Eight Months
  GO TO Q. #132 ====> <9> Nine Months
  GO TO Q. #132 ====> <10> Ten Months
  GO TO Q. #132 ====> <11> Eleven Months
  GO TO Q. #132 ====> <12> Twelve Months
  GO TO Q. #132 ====> <88> Don't Know
 -- ABOVE ANSWER RECORDED AS 13 --
  GO TO Q. #132 ====> <99> Refused
 -- ABOVE ANSWER RECORDED AS 14 --

*** QUESTION #132 ***
{30}DURING THE YEAR 2000, WHAT DID THIS BOAT AND ITS EQUIPMENT (SUCH AS
{30}MOTOR, TRAILER AND HAULING VEHICLE) COST TO OWN AND MAINTAIN?
{30}I'LL BE ASKING ABOUT SEVERAL COST CATEGORIES RELATED TO THIS BOAT.
{30}DURING THE YEAR 2000, HOW MUCH DID YOU SPEND ON … Dry storage PER MONTH?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT, ENTER "0" IF NONE)
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #133 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 100000 --
-- ANSWER REQUIRED --

*** QUESTION #133 ***
   << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
    IF Q#132 EQ 0 TO 0   (CONDITIONAL #4)
   THEN GO TO Q.#134 ELSE GO TO Q.#133.
How many months of the year did you pay for dry storage?
  GO TO Q. #134 ====> <1> One Month
  GO TO Q. #134 ====> <2> Two Months
  GO TO Q. #134 ====> <3> Three Months
  GO TO Q. #134 ====> <4> Four Months
  GO TO Q. #134 ====> <5> Five Months
  GO TO Q. #134 ====> <6> Six Months
  GO TO Q. #134 ====> <7> Seven Months
  GO TO Q. #134 ====> <8> Eight Months
  GO TO Q. #134 ====> <9> Nine Months
  GO TO Q. #134 ====> <10> Ten Months
  GO TO Q. #134 ====> <11> Eleven Months
  GO TO Q. #134 ====> <12> Twelve Months
  GO TO Q. #134 ====> <88> Don't Know
 -- ABOVE ANSWER RECORDED AS 13 --
  GO TO Q. #134 ====> <99> Refused

-- ABOVE ANSWER RECORDED AS 14 --

*** QUESTION #134 ***
{30}DURING THE YEAR 2000, WHAT DID THIS BOAT AND ITS EQUIPMENT (SUCH AS
{30}MOTOR, TRAILER AND HAULING VEHICLE) COST TO OWN AND MAINTAIN?
{30}DURING THE YEAR 2000, HOW MUCH DID YOU SPEND ON Other marina fees (utilities, lockers, etc.) PER MONTH?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT, ENTER "0" IF NONE)
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
GO TO Q. #135 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 100000 --
-- ANSWER REQUIRED --

*** QUESTION #135 ***
<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF Q#134 EQ 0 TO 0 (CONDITIONAL #5)
THEN GO TO Q.#136 ELSE GO TO Q.#135.
How many months of the year did you pay for other marina fees?
GO TO Q. #136 ====> <1> One Month
GO TO Q. #136 ====> <2> Two Months
GO TO Q. #136 ====> <3> Three Months
GO TO Q. #136 ====> <4> Four Months
GO TO Q. #136 ====> <5> Five Months
GO TO Q. #136 ====> <6> Six Months
GO TO Q. #136 ====> <7> Seven Months
GO TO Q. #136 ====> <8> Eight Months
GO TO Q. #136 ====> <9> Nine Months
GO TO Q. #136 ====> <10> Ten Months
GO TO Q. #136 ====> <11> Eleven Months
GO TO Q. #136 ====> <12> Twelve Months
GO TO Q. #136 ====> <88> Don't Know
-- ABOVE ANSWER RECORDED AS 13 --
GO TO Q. #136 ====> <99> Refused
-- ABOVE ANSWER RECORDED AS 14 --

*** QUESTION #136 ***
{30}DURING THE YEAR 2000, WHAT DID THIS BOAT AND ITS EQUIPMENT (SUCH AS
{30}MOTOR, TRAILER AND HAULING VEHICLE) COST TO OWN AND MAINTAIN? .
{30}DURING THE YEAR 2000, HOW MUCH DID YOU SPEND ON Club and association dues or fees?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
GO TO Q. #138 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 100000 --
-- ANSWER REQUIRED --

*** QUESTION #137 ***
{30}DURING THE YEAR 2000, WHAT DID THIS BOAT AND ITS EQUIPMENT (SUCH AS
{30}MOTOR, TRAILER AND HAULING VEHICLE) COST TO OWN AND MAINTAIN? .
{30}DURING THE YEAR 2000, HOW MUCH DID YOU SPEND ON Boating classes or instruction?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
GO TO Q. #138 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 100000 --
-- ANSWER REQUIRED --

*** QUESTION #138 ***
{30}DURING THE YEAR 2000, WHAT DID THIS BOAT AND ITS EQUIPMENT (SUCH AS
{30}MOTOR, TRAILER AND HAULING VEHICLE) COST TO OWN AND MAINTAIN? .
{30}DURING THE YEAR 2000, HOW MUCH DID YOU SPEND ON Other costs
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
GO TO Q. #151 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 100000 --
-- ANSWER REQUIRED --

*** QUESTION #139 ***
During the year 2000, did you earn any money with this boat from activities such as commercial fishing,
chartering, or accommodating paying guests?
GO TO Q. #140 ====> <1> YES
GO TO Q. #151 ====> <2> NO

*** QUESTION #140 ***
During the year 2000, how much did you earn with this boat from commercial fishing?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
GO TO Q. #141 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000000 --
-- ANSWER REQUIRED --

*** QUESTION #141 ***
{30}DURING THE YEAR 2000, HOW MUCH DID YOU EARN WITH THIS BOAT FROM Sports fishing?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
GO TO Q. #142 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000000 --
-- ANSWER REQUIRED --

*** QUESTION #142 ***
{30}DURING THE YEAR 2000, HOW MUCH DID YOU EARN WITH THIS BOAT FROM Sightseeing?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #143 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000000 --
-- ANSWER REQUIRED --

*** QUESTION #143 ***
{30}DURING THE YEAR 2000, HOW MUCH DID YOU EARN WITH THIS BOAT FROM Guests, Bed and Breakfast?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #144 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000000 --
-- ANSWER REQUIRED --

*** QUESTION #144 ***
{30}DURING THE YEAR 2000, HOW MUCH DID YOU EARN WITH THIS BOAT FROM Water taxi or shore boat?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #145 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000000 --
-- ANSWER REQUIRED --

*** QUESTION #145 ***
{30}DURING THE YEAR 2000, HOW MUCH DID YOU EARN WITH THIS BOAT FROM Survey services?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #146 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000000 --
-- ANSWER REQUIRED --

*** QUESTION #146 ***
{30}DURING THE YEAR 2000, HOW MUCH DID YOU EARN WITH THIS BOAT FROM Construction services?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #147 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000000 --
-- ANSWER REQUIRED --

*** QUESTION #147 ***
{30}DURING THE YEAR 2000, HOW MUCH DID YOU EARN WITH THIS BOAT FROM Carrying freight?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #148 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000000 --
-- ANSWER REQUIRED --

*** QUESTION #148 ***
{30}DURING THE YEAR 2000, HOW MUCH DID YOU EARN WITH THIS BOAT FROM Chartering?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #149 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000000 --
-- ANSWER REQUIRED --

*** QUESTION #149 ***
{30}DURING THE YEAR 2000, HOW MUCH DID YOU EARN WITH THIS BOAT FROM Residential Rent?
{30}(INTERVIEWER: ENTER DOLLAR AMOUNT; IF DON'T KNOW ENTER "888.")
  GO TO Q. #150 ====> <1> TEXT
-- NUMERIC OPEN END - RANGE IS 0 THRU 1000000 --
-- ANSWER REQUIRED --

*** QUESTION #150 ***
{30}DURING THE YEAR 2000, HOW MUCH DID YOU EARN WITH THIS BOAT FROM
Other activties I have not mentioned {30} INTERVIEWER: ENTER DESCRIPTION
{30}AND MONEY EARNED. IF DON'T KNOW ENTER "888.")
  GO TO Q. #151 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #151 ***
Now may I ask you to describe yourself in a couple of ways. We use this information to compare boating needs of a variety of people. As always, your answers are confidential.
  GO TO Q. #152 ====> <1> TEXT
-- TEXT SCREEN --

*** QUESTION #152 ***
What is your age?
{30}(INTERVIEWER: IF DECLINE TO ANSWER, TYPE "999".)
  GO TO Q. #153 ====> <1> SPECIFY
-- NUMERIC OPEN END - RANGE IS 1 THRU 999 --
-- ANSWER REQUIRED --

*** QUESTION #153 ***
Was your household's combined income for the year 2000
  GO TO Q. #154 ====> <1> under $25,000
  GO TO Q. #154 ====> <2> $25,000 up to $50,000
  GO TO Q. #154 ====> <3> over $50,000 up to $100,000
  GO TO Q. #154 ====> <4> over $100,000 up to $200,000
  GO TO Q. #154 ====> <5> over $200,000
  GO TO Q. #154 ====> <6> REFUSE

*** QUESTION #154 ***
Finally, do you have any other comments or suggestions about boating facilities in California?
  GO TO Q. #155 ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #155 ***
That was my last question. Thank you very much for your time and information. We appreciate it. Good afternoon / good evening.
  GO TO Q. #161 ====> <1> text

-- TEXT SCREEN --

*** QUESTION #156 ***
My name is [I]##, I am a student at San Francisco State University. We are working with the California Department of Boating and Waterways to conduct a survey of California boat owners. The Department wants to find out how to best use public funds to improve boating facilities. Your responses will be confidential and used only for statistical purposes. The interview will take about 15 minutes. May I please go ahead with our questions?
  GO TO Q. #2   ====> <1> Yes
 DISP CODE #9   ====> <2> SCHEDULE CALLBACK
  GO TO Q. #157 ====> <3> INITIAL REFUSAL
 DISP CODE #13 ====> <4> HANG UP/HARD REFUSAL
 DISP CODE #10 ====> <5> CALL SUBSTITUTE NUMBER
 DISP CODE #6   ====> <6> ALREADY COMPLETE INTERVIEW

*** QUESTION #157 ***
We are not trying to sell anything. This is your chance for your opinions about boating in California to be heard by public officials. Do you want to continue or is there a more convenient time I could call you back?
  GO TO Q. #2   ====> <1> PROCEED WITH INTEVIEW
 DISP CODE #9   ====> <2> SCHEDULE CALLBACK
 DISP CODE #13 ====> <3> HANG UP/HARD REFUSAL

*** QUESTION #158 ***
How many others?
  GO TO Q. #6   ====> <1> SPECIFY
-- MULTI-PUNCH --
-- ANSWER REQUIRED --

*** QUESTION #159 ***
Do you have a boat listed as a [3]## foot [4]##?
{30}(USE THE FOLLOWING INFORMATION FOR VERIFICATION IF NEEDED)
{30} MAKE: [6]##
{30} VESSEL: [7]##
{30} LICENSE: [8]##
{30} OFFICIAL: [9]##
  GO TO Q. #156 ====> <1> YES
  GO TO Q. #160 ====> <2> NO

*** QUESTION #160 ***
Thank you. We're only calling about specific boats. Thank you for your time. Good afternoon / Good evening.
 DISP CODE #17 ====> <1> text
-- TEXT SCREEN --

CALLBACK: DID NOT USE BOAT IN 2000

NE:_____ CASEID:_____

Good Afternoon / Good Evening!

May I speak to _____. My name is _____, and I'm a student at San Francisco State University, calling on behalf of the California Boating and Waterways. We spoke with you a few months ago regarding your _____ foot _____. You indicated you did not use the boat in the year 2000. (To confirm info:)

Make: _____
License: _____

The California Department of Boating and Waterways would like us to ask you a couple of follow up questions that will only take approximately 5 minutes. Can we start with the interview?

Call attempt #1	Date	Time	Outcome
Notes			
Call Attempt #2	Date	Time	Outcome
Notes			
Call Attempt #3	Date	Time	Outcome
Notes			
Call Attempt #4	Date	Time	Outcome
Notes			

Boater 2 Callback - Did Not Use Boat In 2000

Phone #	**Case ID**
Date	**Interviewer ID**

***** QUESTION #175*****

Can you tell me the primary reason you didn't use your boat last year?
<1> OWNER TOO BUSY
<2> TOO EXPENSIVE TO OPERATE
<3> BOAT NEEDS REPAIR
<4> OWNER HAS BEEN ILL (OR IS TOO OLD)
<5> OWNER IS DECEASED
<6> DISSATISFIED WITH BOATING PLACES AND FACILITIES
<7> OTHER REASON
<8> DON'T KNOW
<9> REFUSED

***** QUESTION #16 *****

Where did you usually store this boat during that time? (If respondent says more than one place, emphasize usually).

What is the site name? _____

***** QUESTION #17 *****

In what city or county is that located? _____

***** QUESTION #18 *****

What type of facility is this? Is it a...
<1> Boating facility
<2> Another storage facility {29} RV, STORAGE, ETC
<3> Your own property
<4> Other

***** QUESTION #20 *****

Is this boat stored...
<1> On the water **(If Answer is 1 — skip to Question #23)**
<2> On a trailer **(if Answer is 2, 3 or 4 — Skip to Question #21)**
<3> On a rack
<4> On the ground

***** QUESTION #21 *****

How do you usually launch your boat? (Check all that apply)
<1> A trailer on a launch ramp
<2> Hoist
<3> Launching service
<4> Carry it down to the water
<5> OTHER (SPECIFY) _____
_____

***** QUESTION #23 *****

Is the location where you store your boat covered or open?
<1> COVERED
<2> OPEN

***** QUESTION #24 *****

Was this your preferred place to store this boat during that time?
<1> YES
<2> NO - (if no) Why not? _____
_____

****QUESTION #28 *****

Is there a second place you stored your boat during 2000?
<1> YES
<2> NO **(if no, SKIP to Question #125)**

***** QUESTION #29 *****

What is the name of the location where you stored your boat the second longest in the year 2000?
_____
_____

***** QUESTION #30 *****

In what city or county is that located? _____

***** QUESTION #31 *****

What months of 2000 did you store your boat at (second location indicated on #29)?

<1> ALL YEAR	<6> MAY	<11 > OCTOBER
<2> JANUARY	<7> JUNE	<12> NOVEMBER
<3> FEBRUARY	<8> JULY	<13> DECEMBER
<4> MARCH	<9> AUGUST	
<5> APRIL	<10> SEPTEMBER	

***** QUESTION #32 *****

What type of facility is this? Is it a...,
<1> Boating facility
<2> Another storage facility {29}RV, STORAGE, ETC
<3> Your own property

***** QUESTION #34 *****

Is this boat stored...
<1> On the water **(If Answer is 1 — skip to Question #37)**
<2> On a trailer **(If Answer is 2, 3 or 4 — Skip to Question #35)**
<3> On a rack
<4> On the ground

***** QUESTION #35*****

How do you usually launch your boat? (Check all that apply)
<1> A trailer on a launch ramp
<2> Hoist
<3> Launching service
<4> Carry it down to the water
<5> OTHER (SPECIFY)

***** QUESTION #37 *****

Is the location where you store your boat covered or open?
<1> Covered
<2> Open

***** QUESTION #38 *****

Was this your preferred place to store this boat during that time?
<1> YES
<2> NO - (if no) Why not? _____
_____

***** QUESTION #125 *****

Thank you. Now please think about the annual costs of owning and maintaining this boat, other than money spent on boat trips.

Again, this information is completely confidential, but the aggregate results will be very helpful in demonstrating the benefits of boating to the state economy.

***** QUESTION #126 *****

During the year 2000, how much did you spend on equipment purchases?
<1>$_____
<2> Don't Know

***** QUESTION #127 *****

Repair and maintenance?
<1> $_____
<2> Don't Know

***** QUESTION #128 *****

Insurance?
<1> $_____
<2> Don't Know

***** QUESTION #129 *****

Property Taxes on the boat?
<1> $_____
<2> Don't Know

***** QUESTION #130 *****

Marina slip per month?
<1> $_____
<2> Don't Know

***** QUESTION #131 *****

How many months of the year did you pay for a marina slip?

<1> One Month	<6> Six Months	<11> Eleven Months
<2> Two Months	<7> Seven Months	<12> Twelve Months
<3> Three Months	<8> Eight Months	<88> Don't Know
<4> Four Months	<9> Nine Months	<99> Refused
<5> Five Months	<10> Ten Months	

***** QUESTION #132 *****

Dry storage PER MONTH?
<1> $_____
<2> Don't Know

***** QUESTION #133 *****

How many months of the year did you pay for dry storage?

<1> One Month	<6> Six Months	<11> Eleven Months
<2> Two Months	<7> Seven Months	<12> Twelve Months
<3> Three Months	<8> Eight Months	<88> Don't Know
<4> Four Months	<9> Nine Months	<99> Refused
<5> Five Months	<10> Ten Months	

***** QUESTION #134 *****

Other marina fees (utilities, lockers, etc.) PER MONTH?
<1> $_____
<2> Don't Know

***** QUESTION #135 *****

How many months of the year did you pay for other marina fees?

<1> One Month	<6> Six Months	<11> Eleven Months
<2> Two Months	<7> Seven Months	<12> Twelve Months
<3> Three Months	<8> Eight Months	<88> Don't Know
<4> Four Months	<9> Nine Months	<99> Refused
<5> Five Months	<10> Ten Months	

***** QUESTION #136 *****

Club and association dues or fees?
<1> $_____
<2> Don't Know

***** QUESTION #138 *****

Other costs
<1> $_____
<2> Don't Know

***** QUESTION #151 *****

Now may I ask you to describe yourself in a couple of ways. We use this information to compare boating needs of a variety of people. As always, your answers are confidential.

***** QUESTION #152 *****

What is your age?_____

***** QUESTION #153 *****

Was your household's combined income for the year 2000 ?
<1> under $25,000
<2> $25,000 up to $50,000
<3> over $50,000 up to $100,000
<4> over $100,000 up to $200,000
<5> over $200,000
<8> {30}DON'T KNOW
<9> {30}REFUSE

***** QUESTION #154 *****

Finally, do you have any other comments or suggestions about boating facilities in California?

_____
_____
_____
_____
_____
_____

***** QUESTION #155 *****

That was my last question. Thank you very much for your time and information. We appreciate it. Good afternoon / good evening.

Appendix B

California Non-motorized Boaters Survey

Appendix B Table of Contents

List of Tables and Exhibits

Boating Facilities Needs Assessment Non-Motorized Boat Survey

Appendix B California Non-Motorized Boaters Survey

A. Introduction

Research conducted for the California Boating Facilities Needs Assessment (BNA) included a telephone survey of over 4,000 registered boaters, a telephone survey and supporting research on all California boating facilities, a law enforcement survey, and twelve workshops throughout ten regions of the state. In the original project work plan, there were no provisions for formalized input from non-motorized (i.e. non-registered) boaters.

During the initial workshops, some participants raised issues related specifically to non-motorized boaters. This group of boaters has needs that are different from motorized boaters. Respondents were generally interested in boating trails and low-impact launch sites with gravel parking and restroom facilities spaced at reasonable distances (along a river, for example). Because this group of boaters was not represented in the boater survey, the research team developed a two-page non-motorized boater survey in order to gather additional input from this segment of boaters. This appendix summarizes results from the 124 respondents to the non-motorized boater survey.

B. Methodology

The survey instrument was a two-page questionnaire that contained fourteen questions. Both open-ended and closed-ended question formats were used. A copy of the survey is included at the end of this appendix. The questions were designed to be similar to those asked of the full boater survey.

The survey was distributed at a meeting of a San Francisco Bay Area kayak club (Bay Area Sea Kayakers, BASK) in October 2001, and also made available on the BASK web page. Contacts for an additional ten California kayak and canoe organizations were made aware of the survey and asked to put a link on their web page and/or notify members. Survey responses were received between October 2001 and January 2002. The list of organizations receiving information about the survey is included in **Table B.1**. Two additional organizations (American Whitewater (a national group) and the Humboldt Bay Water Trail Task Force), and a number of individuals also contacted us to obtain copies of the survey.

Table B.1
Organizations Receiving Information on the Non-Motorized Boater Survey

1. California Floaters Society
2. California Kayak Friends
3. Gold Country Paddlers
4. Loma Prieta Paddlers
5. San Diego Kayak Club
6. Santa Barbara Kayak Association
7. Sequoia Paddling Club
8. Shasta Paddlers
9. Stanford Kayak Club
10. Western Sea Kayakers

All of these organizations use email extensively for communication, and surveys were available to all club members. The paddlers' organizations that were contacted are generally groups that encourage their members to be politically and environmentally active. We expect that our survey respondents are a more active and involved group of non-motorized boaters than the average canoe or kayak owner in California, simply because they are active members of kayak or canoe organizations. Because they are active boaters, they may also be likely to be knowledgeable of non-motorized facility needs.

This survey was not a random sampling of non-motorized boaters, and thus no inferences to the non-motorized boater population in California as a whole can be made. However, it provided perspectives on problems and boating facilities needs identified by a category of boaters that has not been represented in previous boating facilities needs assessments.

C. Results

1. *Survey Respondents*

A total of 124 surveys were returned and coded. The majority of respondents were from Northern California, specifically the San Francisco Bay region. **Table B.2** provides the regional distribution of respondents. The eight out-of-state respondents all traveled to California to use their boats, and identified problems and facilities needs for California waterways.

Table B.2
Respondent Distribution by Region

Region	Number of Respondents
North Coast	11
San Francisco	66
Central Coast	2
South Coast	6
San Diego	2
Northern Interior	1
Sacramento Basin	24
Out-of-State	8
None specified	4
Total	**124**

The average age of respondents was 46, somewhat lower than the average age of the boater survey of registered boaters. The income distribution of respondents is shown in **Exhibit B.1**. Over 40 percent of respondents had an annual household income between $50,000 and $100,000. The income distribution of the respondents is fairly similar to that of the boater survey. The type and number of non-motorized boats owned by the respondents is shown in **Exhibit B.2**. Most respondents owned sea kayaks and/or river kayaks, and had multiple boats. The average number of boats per respondent was 3.3.

Exhibit B.1
Income Level of Survey Respondents

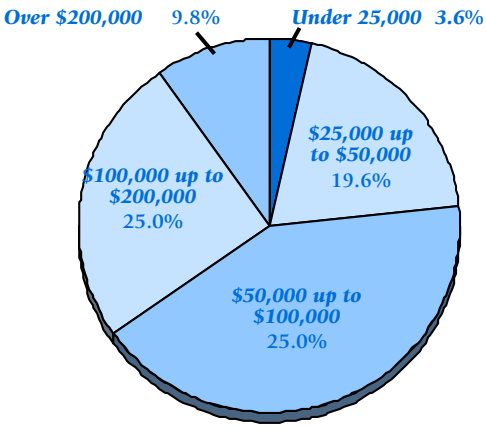
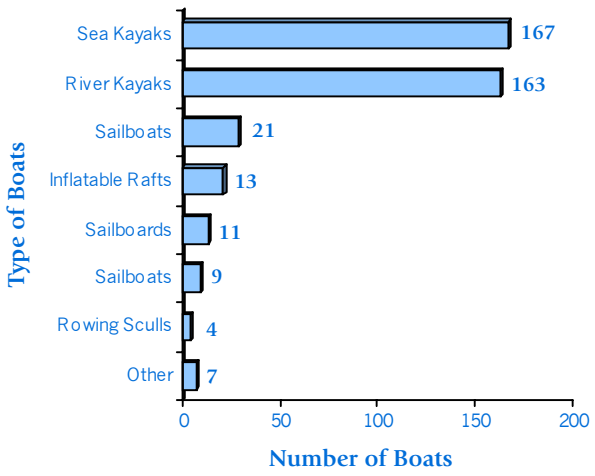


Exhibit B.2
Number and Type of Non-Motorized Boats



Total	413

2. *Boating Activities*

The most frequent destinations identified by respondents are shown in **Table B.3**. Although 66 respondents live in the San Francisco Bay region, only 41 identified the San Francisco Bay as their most frequent destination. The reasons for boating on these waterways are shown in **Table B.4**. Similar to motorized boat owners, proximity to home was the top reason to use a waterway.

Table B.3
Boating Destinations

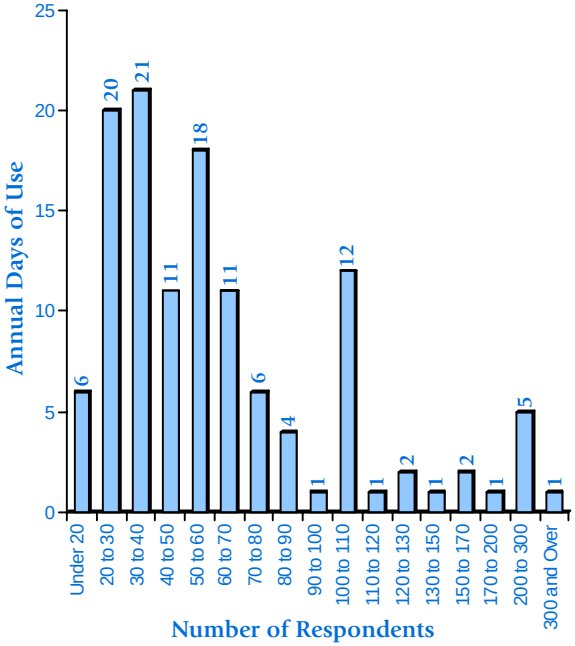
Most Frequent Destination	Frequency
San Francisco Bay	41
American River	21
Trinity River	7
Pacific Ocean	6
Sacramento River	4
Butte Creek	3
Russian River	3
Smith River	3
Central Coast	2
Feather River	2
Humboldt Bay	2
Kern River	2
Lake Tahoe	2
Monterey Bay	2
Tomales Bay	2

Table B.4
Reasons for Boating

Reason	Frequency
Near home	72
Nature scenery	27
Challenging waterway	23
Variety	18
Likes waterway	18
Easy access	10
Leisure	7
Convenience	6
Reliable flows	5
Good currents	4
Boating club/school	4
Good water quality	3
Not crowded	3
Year-round flow	3

Reflecting their involvement in the sport, 113 survey respondents reported that they use their boats every month of the year. Those that do not use their boats all year typically use them between the months of March and October. **Exhibit B.3** illustrates the annual days of usage of respondents. The mean days of use was 61, and the median was 60. Most respondents boat at waterways less than 100 miles from home, traveling further for 20 percent or fewer of their trips.

Exhibit B.3
Annual Days of Use by Survey Respondents



Non-motorized boaters were asked the same questions as motorized boaters (adjusted to reflect use patterns) about their annual and daily trip expenditures. The average daily trip expenditure among the respondents was $88. **Table B.5** provides the average daily trip expenses by category. The average annual expenditure among the respondents was $2,413. **Table B.6** provides the average annual expenses by category.

Table B.5
Average Daily Trip Expenditures of Respondents

	Average Expenditure
Grocery and convenience	$12
Hotels/motels	13
Restaurants	14
Auto gas	17
Park entrance	3
Incidentals	3
Gifts, retail	4
Parking	4
Other	4
Campgrounds	7
Boating equipment	7
Drug stores	<1
Total	**$88**

Table B.6
Average Annual Expenditures of Respondents

	Average Expenditure
Equipment	$1,358
Maintenance	185
Clubs, etc.	105
Instruction	405
Other	360
Total	**$2,413**

3. *Problems and Facility Needs*

Problems Identified by Non-Motorized Boaters

Table B.7 provides the fifteen problems most frequently mentioned by non-motorized boaters. Inadequate access and parking were mentioned most often. **Tables B.8** through **B.11** provide a list of waterways where the most frequently mentioned problems occur. As might be expected, given the high number of respondents from the San Francisco Bay region, the San Francisco Bay was identified most often for each problem.

Table B.7
Problems at Waterways

Problem	Frequency
1. Not enough access	42
2. Inadequate parking	27
3. No restrooms/inadequate restrooms	9
4. Poor water quality	9
5. Unpredictable flows	7
6. Reckless boaters	6
7. Too crowded	6
8. Campsites	4
9. Low water level	4
10. PWC's	3
11. Difficult to launch	2
12. Floating debris	2
13. Not enough facilities	2
14. Overuse by commercial outfitters	2
15. Landowners/paddler rights disputes	2

Table B.8
Waterways with Not Enough Access

Waterway	Frequency
San Francisco Bay	19
American River	8
Pacific Ocean	3
Trinity River	3
Feather River	2
American River	1
Central Coast	1
Humboldt Bay	1
Russian River	1
Russian River	1
Sacramento River	1
Tomales Bay	1

Table B.9
Waterways with Inadequate Parking

Waterway	Frequency
San Francisco Bay	16
American River	5
Feather River	1
Marin Coastline	1
North Coast	1
Pacific Ocean	1
Russian River	1
Tomales Bay	1

Table B.10
Waterways with Inadequate Restrooms

Waterway	Frequency
San Francisco Bay	2
Elkhorn Slough	1
Marin Coastline	1
Pacific Ocean	1
Richardson Bay	1
Smith River	1
Tomales Bay	1
Trinity River	1

Table B.11
Waterways with Poor Water Quality

Waterway	Frequency
San Francisco Bay	2
Alameda-Oakland Estuary	1
Central Coast	1
Channel Islands	1
Mission Bay	1
Russian River	1
Sacramento River	1
San Francisco North Bay	1

Facilities Needs Identified by Non-Motorized Boaters

Table B.12 identifies the eighteen most frequently mentioned facilities needs. Reflecting the problems identified above, the most often-mentioned needs are access points/launch ramps and overnight parking/parking facilities. **Tables B.13** through **B.16** list all the waterways where the top four facilities needs were mentioned. Again, San Francisco Bay is mentioned most often for all four top facilities needs.

Table B.12
Facilities Needs at Waterways

Facility needs	Frequency
1. Access points/launch ramps	125
2. Overnight parking/parking facilities	62
3. Restroom/improved restrooms	33
4. Boat-in camping	10
5. Kayak storage area	8
6. Powerboat free zones	7
7. Additional facilities	6
8. Free access	6
9. Water releases/maintain water level	5
10. Showers	4
11. Signage to protect private property and environmentally sensitive areas	4
12. White water park	4
13. Freshwater boat wash	3
14. Low impact facilities	3
15. Improve water quality	2
16. Paddler docks	2
17. Safer put-in points	2
18. Water trail	2

Table B.13
Waterways with Need for Access Points/Launch Ramps

Waterway	Frequency
San Francisco Bay	23
American River	15
Feather River	8
Consumnes River	5
Russian River	5
Mokelumne River	4
Sacramento River	4
Tomales Bay	4
Pacific Ocean	3
Trinity River	3
Central Coast	2
Estero de San Antonio	2
Humboldt Bay	2
Mcloud River	2
Monterey Bay	2
Smith River	2
Tuolumne River	2
Yuba River	2
Alamitos Bay	1
American Estero	1
Butte Creek	1
Cache Creek	1
Deer Creek	1
Drakes Bay	1
Eel River	1
Elkhorn Slough	1
Folsom Lake	1
Gallinas Creek	1
Greenwood Creek	1
Klamath River	1
Lake Chabot	1
Lake Hodges	1
Lake Oroville	1
Lake Tahoe	1
Long Beach	1
Mad River Slough	1
Merced River	1
Paradise Park	1
Refugio	1
Richardson Bay	1
Rio Del Mar State Beach	1
Rock Creek	1
San Antonio Estero	1
San Francisco North Bay	1
San Francisco Waterfront	1
San Pablo Bay	1
Sausalito Waterfront	1
Sonoma Coast	1
South Fork Trinity	1
Stanislaus River	1
Tiburon-Paradise Park	1
Trinidad Harbor	1
Truckee River	1

Table B.14
Waterways with Need for Overnight Parking/Parking Facilities

Waterway	Frequency
San Francisco Bay	20
American River	13
Deer Creek	2
Feather River	2
Mokelumne River	2
Tomales Bay	2
Drakes Bay	1
Estero San Antonio	1
Folsom Lake	1
Horseshoe Bay	1
Horseshoe Cove	1
Humboldt Bay	1
Mad River	1
Marin Coastline	1
Newport Harbor	1
North Coast	1
Pacific Ocean	1
Pillar Point Harbor	1
Richardson Bay	1
Russian River	1
Sacramento River	1
San Francisco South Bay	1
Sausalito Bay	1
South Fork Trinity	1
State beaches	1
Trinity River	1
Truckee River	1

Table B.15
Waterways with Need for Restrooms/Improved Restrooms

Waterway	Frequency
San Francisco Bay	6
American River	3
Smith River	3
Trinity River	3
Half Moon Bay	2
Delta Meadows	1
Eel River	1
Elkhorn Slough	1
Humboldt Bay	1
Lake Natoma	1
Marin Coastline	1
Mokelumne River	1
New River	1
Newark Slough	1
Oakland Estuary	1
Pacific Ocean	1
San Leandro Bay	1
Tomales Bay	1
Truckee River	1
Union Reservoir	1
Utica	1

Table B.16
Waterways with Needs for Boat-in Camping

Waterway	Frequency
San Francisco Bay	4
Angel Island	1
Humboldt Bay	1
Lake Tahoe	1
Pacific Ocean	1
Russian River	1
Tomales Bay	1

Respondents were given an opportunity to provide additional comments at the end of the survey. **Table B.17** lists all comments with more than one response.

Table B.17
Additional Open-Ended Comments of Respondents

Comment	Frequency
Access points/launch ramps	34
Parking	17
More low environmental impact facilities	16
Campsites	8
Restrooms/Port-a-Potties	7
Water trail	6
Emphasis on needs of non-motorized boaters	5
Motor boat free zones	4
Ban/ Restrict PWCs	3
Appreciates survey	2
Boat storage	2
Landowner/paddler rights dispute	2
Limited releases are a problem	2
More reliable flows	2
No dams	2
Parking close to launch point	2
Preserve wild habitat	2
Scenery/nature	2
State river parks	2
Waterways are good	2

4. Conclusions

This survey helps provide insight into the characteristics and facilities needs of a category of boaters that may be overlooked in boating facilities planning. There are an estimated 97,000 non-motorized boats in California, about 10 percent of the boat population. The needs of this group of boaters are very different from motorized boaters and PWC operators, and often are in conflict with these groups. The greatest needs, as reflected in the survey responses and the workshops, is for simple, low-impact facilities that provide access, parking, and restrooms. The results of this survey provide a resource to assist in facility planning for non-motorized boats and boaters in California.

Boating Facilities Needs Assessment
Non-Motorized Boat Survey

The California Department of Boating and Waterways (DBW) is conducting an assessment of California's boating facilities. DBW serves all segments of California's boating public: powerboaters and sailboaters; personal watercraft users; windsurfers and water skiers; kayakers, canoeists and rafters. This survey is intended to gather input on facility needs from the non-motorized boating community.

1. Please identify the number of each of the following types of boats you own.

   Sea Kayaks _____ Canoes _____ Sailboards _____ Inflatable Rafts_____
   River Kayaks _____ Rowing Sculls _____ Sailboats _____ Other _____

2. Which months of the year do you use these boats?

   ☐ All ☐ Jan ☐ Feb ☐ Mar ☐ Apr ☐ May ☐ June
   ☐ July ☐ Aug ☐ Sept ☐ Oct ☐ Nov ☐ Dec

3. Approximately how many days a year do you use these boats? _____

4. On what waterway do you boat most often? _____

5. Why do you boat at this waterway?_____

   _____

6. Are there any problems at this waterway? _____

   _____

7. Does this location have any paddling facility needs? ☐ Yes ☐ No *(if yes, please specify)*

   _____

   _____

8. Please identify up to three other waterways with paddling facility needs:

Waterway	Needs
1._____	_____
2._____	_____
3._____	_____

Part of the DBW study involves an analysis of the economic value of boating in California. Please estimate your expenses related to the boats listed above in the following categories.

9. a) Annual equipment expenses *(including boats)* _____

   b) Annual maintenance expenses _____

   c) Annual expenses for clubs, memberships, and fees _____

   d) Annual expenses for boating classes or instruction _____

   e) Other annual expenses *(specify)* _____

10. Please estimate your expenses for one day on a typical boating trip:

a) grocery and convenience stores _____	b) restaurants _____
c) hotels/motels _____	d) campgrounds _____
e) gifts, souvenirs, retail stores _____	f) drug stores _____
g) boating equipment _____	h) gasoline *(for auto)* _____
i) parking _____	j) park entrance fees _____
k) incidentals _____	l) other *(specify)* _____

11. Approximately what percentage of your boating trips are to locations more than 100 miles from where you live?_____

12. Do you have any additional comments or suggestions about California's boating facilities?

_____

_____

_____

_____

_____

Optional information:

13. What is your age? _____

14. What was your household's combined income for the year 2000?

☐ Under $25,000 ☐ $25,000 up to $50,000 ☐ Over $50,000 up to $100,000
☐ Over $100,000 up to $200,000 ☐ Over $200,000

Thank-you for your participation. Results of the facility assessment will be available on DBW's web site next summer.

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Appendix C

California Boating Facilities Survey

Appendix C Table of Contents

Appendix C California Boating Facilities Survey

Appendix C1
California Boating Facilities Survey Methodology

This Appendix includes a discussion of the Boating Facility Survey methodology as well as an assessment of the number of facilities and waterways included in the survey. A copy of the survey is included at the end of Appendix C1.

A. The Boating Facilities Survey Methodology

The facility survey process involved four major tracks: 1) development of the survey questionnaire, 2) updating and verifying the existing DBW facility database, 3) conducting the survey, and 4) analyzing the data.

The survey of California boating facilities was developed in the Spring of 2001, through a collaborative process with the BNA project team. After a written version of the survey was developed and approved, the survey was given to the Public Research Institute (PRI) at San Francisco State University to develop a format ready for computer assisted telephone interviews. A pretest was conducted in June 2001 on 25 facilities, and adjustments were made to shorten and improve the survey upon completion of the pretest. A copy of the final survey is provided following page C-30. PRI conducted telephone interviews of facilities from late July through October 2001. The interviews took an average of 25 minutes each on the phone.

The results of PRI's interviews are shown in **Exhibit C1.1**, on the following page. Contact information for 921 facilities was provided to PRI during this time (there were some duplications when new information was obtained for a facility previously on the list). Interviews were completed for 424 facilities (a few less than the 429 in Exhibit C1.1 due to duplicates). Seventy facilities located in the Sacramento-San Joaquin Delta were removed from the survey list in early August to avoid duplication with another DBW study, the Delta Study interviews ("Not in Study Population" in Exhibit C1.1).

A relatively small number of facilities, 6.8 percent of those qualified for the survey, refused to participate. PRI called each facility at least seven times on different days and at different times to try to complete the interview. There were 193 facilities for which interviews were not conducted after 7 calls. Many of these facilities may be considered "soft refusals", where the interviewer was put off repeatedly, rather than simply rejected. A total of 93 facilities said that they had already completed an interview. Some of these were repeats, where a respondent answered questions about two or more facilities in one interview, but in other cases they did not complete the BNA survey. There were also a relatively large number of disconnected phone numbers.

Exhibit C1.1
Final Sample Disposition from PRI

Final Sample Disposition
DBW Boating Facilities Study
Telephone Survey

Pretest Interviews Conducted:	06/19/01 - 06/27/01
Final Interviews Conducted:	07/20/01 - 10/30/01
Complete Telephone Interviews:	429
Response Rate:	64.75%
Maximum Attempts per Number:	7

Outcome		Frequency	Percent of Sample	Cumulative Percent
Qualified for Survey	**Percent of Qualified**			
Completes	63.3%	429	46.6%	46.6%
Partial Completes	1.5%	10	1.1%	47.7%
Refusals	6.8%	46	5.0%	52.7%
Over Maximum Attempts	28.5%	193	21.0%	73.6%
Total Qualified	**100%**	**678**	**73.6%**	
Not Qualified for Survey	**Percent of Non-Usable**			
Already Completed Interview	38.3%	93	10.1%	10.1%
Not in Study Population	28.8%	70	7.6%	17.7%
Disconnected Phone Number	32.9%	80	8.7%	26.4%
Total Non-Usable	**100%**	**243**	**26.4%**	
Total Sample		**921**	**100.0%**	

Total Completes:	429
Total Refusals:	46
Refusal Rate:	6.8%

Average Length of Interview

Pretest:	39 minutes
Final:	25 minutes

In order to obtain more complete information on California's boating facilities, the project team conducted a survey follow-up in November and December 2001. Contact information was provided on 320 of the facilities remaining after PRI completed their interviews, including hard refusals, disconnected phone numbers, facilities that claimed they were not a boating facility, new facilities, and those for which over 7 attempts were made.

The CSUS student team conducted research and interviews on these facilities. Hard refusal facilities were verified through research and added to the database. If facilities claimed they were not a boating facility, they were researched to verify the claim. Those that actually were not boating facilities were removed from the database, while interviews were attempted with those that actually were boating facilities. Facilities with disconnected numbers were also researched to determine if the facility still existed and if so, the new telephone number. Closed facilities were removed from the database and interviews were attempted when new numbers were obtained.

The CSUS student team completed 87 full interviews, bringing the number of full interviews to 511. In addition, another 78 facilities were verified through research and secondary sources, and were added to the facility database. Survey results for 57 facility surveys conducted as part of the Delta Study were also incorporated into the survey database for a total of 646 facilities in the database. **Table C1.1** summarizes the facility count at the time this report was prepared.

Table C1.1
Summary of Boating Facilities and Surveyed Facilities

Survey Status	Number of Facilities
Completed Telephone Surveys	511
BNA Research Verified	78
Delta Completed Surveys	57
Total in BNA Survey Results	**646**
Non-Verified BNA Facilities	145
Non-Verified Delta Facilities	27
Total Statewide Facilities	**818**
Percent of Total in Results	**79%**

As discussed above, the facility survey results are a merging of three separate sources, the telephone surveys, the BNA research, and the Delta Study. Basic information on the facility, services, location, and capacity was obtained for all facilities as completely as possible. The Delta Study Survey also asked a series of questions on dock age and upgrade costs, and open-ended questions. These were incorporated into the survey results to be consistent with the telephone survey. Information obtained about each facility was not entirely consistent. Even within the telephone surveys, respondents were not always able to answer all questions.

To account for the variations in the number of facilities answering a particular question, the analysis, and discussion in Chapter 3 is based on the number of facilities responding to a particular question, not the total number of facilities in the database. These results can be extrapolated to the entire population or subsets of the population, as appropriate.

B. An Assessment of Facilities and Waterways

1. *Facilities*

The BNA survey includes 79 percent of the estimated number of boating facilities statewide. This number is large enough to provide a representative picture of boating facilities and facility needs statewide and by region. There are some regions with lower representation, such as the Northern Interior and Eastern Sierra. These regions have a large number of relatively small waterways and relatively undeveloped facilities that were difficult to identify and contact. While the implications of these missing facilities is high for the regional analysis, there is little impact on the statewide analysis. **Table C2.2** summarizes non-verified facilities and those in the survey results by region.

Table C2.3 provides a summary of the total estimated number of facilities of each type and the percent of total that is included in the survey results. The estimated statewide capacity information is provided in **Table C2.4**. The survey includes 71 percent of the estimated launch ramp facilities statewide. An estimate of the total number of launch ramp lanes, 1,638, was made by multiplying the launch facilities not included or that did not provide an estimate of lanes by the average number of lanes per region. Only 19 dry storage facilities were not included in the survey; however, this number is probably low, as there was little information on dry storage. In addition, a large percentage of the dry storage capacity in the state is provided through non-boating facilities such as RV lots and storage facilities. Again, an estimate of the total number of

Table C1.2
Number of Facilities and Waterways—Surveyed and in Database

	Survey Facilities					Verified Facilities					Total Database Facilities				
Region	Number of Surveyed Facilities	Number of Waterways with Surveyed Facilities	Number of Surveyed Launch Ramps	Number of Surveyed Dry Storage	Number of Surveyed Wet Storage	Number of Verified Facilities	Number of Waterways with Verified Facilities	Number of Verified Launch Ramps	Number of Verified Dry Storage	Number of Verified Wet Storage	Number of Database Facilities	Number of Waterways with Database Facilities	Number of Database Launch Ramps	Number of Database Dry Storage	Number of Database Wet Storage
North Coast	30	13	18	6	18	12	4	10	1	2	42	17	28	7	20
San Francisco	138	38	73	57	112	11	6	17	1	3	149	44	90	58	115
Central Coast	21	9	14	10	18	3	3	4	0	1	24	12	18	10	19
South Coast	93	22	21	20	86	17	2	11	4	10	110	24	32	24	96
San Diego	41	12	10	9	39	17	10	13	1	4	58	22	23	10	43
Northern Interior	10	7	9	3	4	10	10	10	0	1	20	17	19	3	5
Sacramento Basin	183	53	140	48	125	50	13	43	6	15	233	66	183	54	140
Central Valley	73	41	54	22	47	27	11	27	3	8	100	52	81	25	55
Eastern Sierra	21	18	19	8	14	14	7	14	1	4	35	25	33	9	18
Southern Interior	36	10	27	20	26	11	4	12	2	2	47	14	39	22	28
Totals	**646**	**223**	**385**	**203**	**489**	**172**	**70**	**161**	**19**	**50**	**818**	**293**	**546**	**222**	**539**

Table C1.3
Estimates of Total Facilities and Percentages in Survey

Region	Total Waterways	Waterways in Survey	Total Facilities	Facilities in Survey	Total Launch Facilities	Launch Facilities in Survey	Total Dry Storage	Dry Storage in Survey	Total Wet Storage	Wet Storage in Survey
North Coast	17	76%	42	71%	28	64%	7	86%	20	90%
San Francisco	44	86%	149	93%	90	81%	58	98%	115	97%
Central Coast	12	75%	24	88%	18	78%	10	100%	19	95%
South Coast	24	92%	110	85%	32	66%	24	83%	96	90%
San Diego	22	55%	58	71%	23	43%	10	90%	43	91%
Northern Interior	17	41%	20	50%	19	47%	3	100%	5	80%
Sacramento Basin	66	80%	233	79%	183	77%	54	89%	140	89%
Central Valley	52	79%	100	73%	81	67%	25	88%	55	85%
Eastern Sierra	25	72%	35	60%	33	58%	9	89%	18	78%
Southern Interior	14	71%	47	77%	39	69%	22	91%	28	93%
Totals	**293**	**76%**	**818**	**79%**	**546**	**71%**	**222**	**91%**	**539**	**91%**

Table C1.4
Estimates of Total State Capacity for Launch Ramp Lanes, Dry Storage Spaces, and Wet Storage Berths or Mooring

	Total Facilities	Launch Ramp Lanes	Dry Storage	Wet Storage
Numbers Included in Survey	646	942	18,689	82,328
Estimates Excluded	172	696	3,226	31,320
Total Estimates	**818**	**1,638**	**21,915**	**113,648**
Percent of Total in Survey	**79%**	**58%**	**85%**	**72%**

dry storage spaces at boating facilities (21,919) was made by multiplying the number of missing facilities and those that did not provide capacity information by the average dry storage capacity, for each region. The survey included an estimated 91 percent of all wet storage facilities. Total wet storage capacity (113,698) was estimated by multiplying the 119 facilities (in the survey and verified facilities) that did not provide capacity information by the average total capacity at wet storage facilities by region.

The analysis in this report is based on the 646 facilities in the BNA facility database. The final facility database in the Addendum contains additional information on the 172 facilities that are not in the survey. The database includes information on the location, contact information, and basic facility description and services for most facilities. A sample of the form used for this survey follows page C-30.

A Note on the Number of Facilities

Boating facilities in California can be difficult to count. In some cases, what constitutes a facility is easily defined – a particular marina or launch ramp with a specific location, operator, address, and telephone number. In other cases, it is more difficult to define a facility, and because of different ownership and management structures, the definition may not be consistent across the State. For example, there are six launch ramp locations on Shasta Lake that are owned and operated by the U.S. Forest Service. For the purposes of the facility survey, separate interviews were conducted with managers for each of these facilities. This is a reasonable approach given the size of the lake and the distance between facilities. On Castaic Lake, there are at least two launch ramp locations operated by the Los Angeles County Department of Parks and Recreation. These were treated as one facility for the purposes of the survey. In most cases, multiple ramps on a lake or reservoir that are operated by one agency were treated as one facility. Also, for the purposes of the survey and analysis, a single facility with multiple features, (for example, a launch ramp, marina, and dry storage), is counted as one facility. In the situation where a launch ramp on a reservoir is owned and operated by a public agency and a marina is operated by a concessionaire, it is counted as two separate facilities. In general, the facility database does not include facilities or waterways that are designed solely for non-motorized watercraft. **Volume III, Appendix B** includes a discussion of use patterns and facility needs for non-motorized boaters.

2. Waterways

There are 246 "waterways" with facilities identified in the boating survey. Like facilities, waterways can be difficult to count. In certain waterways, there is overlap, making definitions unclear. The San Francisco Bay is divided into four "waterways" – North, South, East, and West, plus several specific locations within the bay such as the Oakland Estuary. Each of these is counted as a separate waterway within the 246, and some waterways in Tables C2.2 and C2.3 are counted in multiple regions, thus the sum in these tables is higher than the 246 waterways listed in Exhibit C1.2. The Sacramento-San Joaquin Delta is counted as one waterway for the purposes of our analysis, but could easily be divided into multiple waterways as it was for the Delta Study. There are also a large number of waterways that do not have facilities, or identified facilities for motorized boats, and these are not included in the database. The Pacific Ocean is counted once, but obviously applies to a large portion of the State's water. For the most part, harbors and bays on the Pacific Ocean are identified by specific names, such as Marina Del Rey, Monterey Bay, and L.A.-Long Beach Harbor. Thus, while the number of waterways provides an approximation of the statewide bodies of water, the number should not be taken as an exact count. A full list of waterways in the facility database is provided in **Exhibit C1.2**.

Exhibit C1.2
List of Individual Waterways with Known Boating Facilities

1. Agua Hediondia Lagoon
2. Alameda Bay
3. Alamitos Bay
4. Albion River
5. Anderson Lake
6. Antelope Lake
7. Avalon Harbor
8. Avocado Lake
9. Barrett Lake
10. Bass Lake
11. Bear River Reservoir
12. Beardsley Reservoir
13. Berenda Reservoir
14. Bethany Reservoir
15. Big Bear Lake
16. Big Lagoon
17. Big Sage Reservoir
18. Black Butte Lake
19. Blue Lake
20. Boca Reservoir
21. Bodega Bay
22. Bridgeport Reservoir
23. Brite Valley Lake
24. Bucks Lake
25. Bullards Bar Reservoir
26. Butt Valley Reservoir
27. Cache Creek
28. Calero Reservoir
29. Camp Far West Lake
30. Caples Lake
31. Carquinez Strait
32. Castaic Lake
33. Channel Islands Harbor
34. Cherry Lake
35. Chesbro Reservoir
36. Clear Lake
37. Collins Lake
38. Colorado River
39. Contra Loma Reservoir
40. Convict Lake
41. Copco Reservoir
42. Courtright Reservoir
43. Coyote Lake
44. Crater Lake
45. Crescent City Harbor
46. Crowley Lake
47. Cuyamaca Lake
48. Dana Harbor
49. Del Valle Reservoir
50. Diaz Lake
51. Dodge Reservoir
52. Don Pedro Lake
53. Donner Lake
54. Dorris Reservoir
55. Eagle Lake
56. East Park Reservoir
57. Eastman Lake
58. Echo Lake
59. Eel River
60. El Capitan Lake
61. Elizabeth Lake
62. Elkhorn Slough
63. Englebright Lake
64. Fallen Leaf Lake
65. Feather River
66. Fee Reservoir
67. Florence Lake
68. Folsom Lake
69. French Meadows Reservoir
70. Frenchman Lake
71. Fresno Slough
72. Fuller Lake
73. Gold Lake
74. Grant Lake
75. Gull Lake
76. Hell Hole Reservoir
77. Hensley Lake
78. Highland Lakes
79. Hodges Reservoir
80. Humboldt Bay
81. Hume Lake
82. Huntington Harbor
83. Huntington Lake
84. Ice House Reservoir
85. Indian Creek Reservoir
86. Indian Valley Reservoir
87. Iron Gate Reservoir
88. Jackson Meadows Reservoir
89. Janes Reservoir
90. Jenkinson Lake
91. June Lake
92. Kaweah Reservoir
93. Kerckhoff Reservoir
94. Kid Lake
95. King Harbor
96. Klamath River
97. L.A.-Long Beach Harbor
98. Lagoon Valley Lake
99. Laguna Lake
100. Lake Almanor
101. Lake Alpine
102. Lake Amador
103. Lake Berryessa
104. Lake Britton
105. Lake Buena Vista
106. Lake Cachuma
107. Lake Cahuilla
108. Lake Camanche
109. Lake Casitas
110. Lake Chabot
111. Lake Clementine
112. Lake Cunningham
113. Lake Davis
114. Lake Dixon
115. Lake Elizabeth
116. Lake Elsinore
117. Lake George
118. Lake Havasu
119. Lake Hemet
120. Lake Hennessey
121. Lake Henshaw
122. Lake Isabella
123. Lake McCloud
124. Lake McClure
125. Lake McSwain
126. Lake Mendocino
127. Lake Merced
128. Lake Merrit
129. Lake Ming
130. Lake Miramar
131. Lake Morena
132. Lake Nacimiento
133. Lake Oroville
134. Lake Pardee
135. Lake Perris
136. Lake Pillsbury
137. Lake Piru
138. Lake Poway

Exhibit C1.2 *(continued)*

139. Lake Pyramid
140. Lake Ralphine
141. Lake Sabrina
142. Lake San Antonio
143. Lake Shastina
144. Lake Siskiyou
145. Lake Skinner
146. Lake Solano
147. Lake Sonoma
148. Lake Tahoe
149. Lake Thomas A. Edison
150. Lake Tulloch
151. Lake Wohlford
152. Lake Woollomes
153. Lake Yosemite
154. Lakes Earl & Talawa
155. Lewiston Lake
156. Lexington Reservoir
127. Lido Peninsula
128. Little Grass Valley Reservoir
129. Little Rock Reservoir
130. Loch Lomond Reservoir
131. Loon Lake
132. Lopez Lake
133. Los Banos Creek Reservoir
134. Lower Sardine Lake
135. Lundy Lake
136. Lyon Reservoir
137. Macumber Reservoir
138. Mammoth Pool Reservoir
139. Mare Island Strait
140. Marina Del Rey
141. Medicine Lake
142. Millerton Lake
143. Mission Bay
144. Modesto Reservoir
145. Mono Lake
146. Monterey Bay
147. Morning Star Lake
148. Morro Bay
149. Mountain Meadows Reservoir
150. Murray Reservoir
151. Napa River
152. New Hogan Lake
153. New Melones Reservoir
154. New Spicer Meadow Reservoir
155. Newport Harbor
156. North Battle Creek Reservoir
157. Noyo River
158. Oakland Estuary
159. Oceanside Harbor
160. O,Neill Forebay
161. Otay Lake
162. Pacific Ocean
163. Packer Lake
164. Petaluma River
165. Pillar Point Harbor
166. Pine Flat Lake
167. Pinecrest Lake
168. Pinto Lake
169. Pit River
170. Port San Luis Harbor
171. Prosser Reservoir
172. Puddingstone Lake
173. Rancho Seco Lake
174. Redinger Lake
175. Richardson Bay (estuary, arm of San Francisco Bay)
176. Rock Creek Lake
177. Rollins Lake
178. Russian River
179. Ruth Lake
180. Sacramento River
181. Sacramento-San Joaquin Delta
182. Saddlebag Lake
183. Salt Spring Reservoir
184. Salton Sea
185. San Diego Bay
186. San Francisco Bay – San Mateo Marina Lagoon
187. San Francisco East Bay
188. San Francisco North Bay
189. San Francisco South Bay
190. San Francisco West Bay
191. San Joaquin River
192. San Leandro Bay
193. San Luis Reservoir
194. San Pablo Bay
195. San Pablo Reservoir
196. San Rafael Canal
197. San Vicente Reservoir
198. Santa Barbara Channel
199. Santa Fe Dam Reservoir
200. Santa Margarita Lake
201. Santee Lakes
202. Sardine Lake
203. Scotts Flat Reservoir
204. Shadow Cliffs Lake
205. Shasta Lake
206. Shaver Lake
207. Shelter Cover (Pacific Ocean)
208. Shelter Island Yacht Basin
209. Silver Lake
210. Silverwood Lake
211. Smith River
212. Smith's Slough
213. South Lake
214. Spring Lake
215. Stampede Reservoir
216. Steven's Creek Reservoir
217. Stony Gorge Reservoir
218. Stumpy Meadows Reservoir
219. Success Lake
220. Sugar Pine Reservoir
221. Suisun Bay
222. Sunbeam Reservoir
223. Sutherland Reservoir
224. Thermolito Forebay
225. Tomales Bay
226. Topaz Lake
227. Trinity Lake
228. Tule Lake
229. Turlock Lake
230. Twin Lakes
231. Two Harbors
232. Union Valley Reservoir
233. Upper & Lower Blue Lakes
234. Upper Twin Lake
235. Uvas Reservoir
236. Vasona Lake
237. Ventura Harbor
238. Virginia Lakes
239. Webber Lake
240. Weist Lake
241. West Valley Reservoir
242. Whiskeytown Lake
243. Wishon Reservoir
244. Woodward Reservoir
245. Yuba River
246. Zacca Lake

Appendix C2
California Boating Facilities Data Tables

Table C2.1
Number of Facilities in Facility Survey by Type and Region

Region	Launch Ramps	Dry Storage	Wet Storage
1. North Coast	18	6	18
2. San Francisco	73	57	112
3. Central Coast	14	10	18
4. South Coast	21	20	86
5. San Diego	10	9	39
6. Northern Interior	9	3	4
7. Sacramento Basin	140	48	125
8. Central Valley	54	22	47
9. Eastern Sierra	19	8	14
10. Southern Interior	27	20	26
Total	385	203	489

Table C2.2
Number of Facilities in Facility Survey by Services Provided and Region

Region	Dry Storage	Launch	Launch/ Dry	Marina	Marina/ Dry	Marina/ Launch	Marina/ Launch/ Dry	"No Facility"	Total
11. North Coast	1	9	1	11	—	4	4	—	30
12. San Francisco	1	20	4	44	19	16	33	1	138
13. Central Coast	1	2	—	5	1	4	8	—	21
14. South Coast	1	4	1	64	6	4	12	1	93
15. San Diego	—	2	—	27	4	3	5	—	41
16. Northern Interior	—	6	—	1	—	—	3	—	9
17. Sacramento Basin	—	55	1	22	18	55	29	3	184
18. Central Valley	1	21	4	16	2	14	15	—	73
19. Eastern Sierra	—	6	—	—	1	6	7	1	21
20. Southern Interior	1	4	4	4	3	7	12	1	36
Total	6	129	15	194	54	113	128	7	646

Table C2.3
Ownership of Boating Facilities

Region	Dry Storage	Launch	Launch/ Dry	Marina	Marina/ Dry	Marina/ Launch	Marina/ Launch/ Dry	"No Facility"	Total
Public	1	118	6	36	7	41	30	4	243
Private	5	11	9	157	47	72	98	4	403
Total	**6**	**129**	**15**	**193**	**54**	**113**	**128**	**8**	**646**

Table C2.4
Regional Distribution of Total Slips and Tie-ups

Region	Category	Total	Percent of State
1. North Coast	Total capacity for slips or tie-ups	2,874	3%
	Number of wet storage facilities	18	4%
2. San Francisco	Total capacity for slips or tie-ups	23,919	29%
	Number of wet storage facilities	112	23%
3. Central Coast	Total capacity for slips or tie-ups	3,138	4%
	Number of wet storage facilities	18	4%
4. South Coast	Total capacity for slips or tie-ups	23,464	29%
	Number of wet storage facilities	86	18%
5. San Diego	Total capacity for slips or tie-ups	8,952	11%
	Number of wet storage facilities	39	8%
6. Northern Interior	Total capacity for slips or tie-ups	130	<1%
	Number of wet storage facilities	4	1%
7. Sacramento Basin	Total capacity for slips or tie-ups	11,091	13%
	Number of wet storage facilities	125	26%
8. Central Valley	Total capacity for slips or tie-ups	5,644	7%
	Number of wet storage facilities	47	10%
9. Eastern Sierra	Total capacity for slips or tie-ups	504	1%
	Number of wet storage facilities	14	3%
10. Southern Interior	Total capacity for slips or tie-ups	2,612	3%
	Number of wet storage facilities	26	5%
State Totals	**Total Capacity for Slips or Tie-ups**	**82,328**	**100%**
	Number of Wet Storage Facilities	**489**	**100%**

Table C2.5
Regional Distribution of Dock Types – Total Slips and Number of Facilities

Region	Category	Wood	Concrete	Other
1. North Coast	Total Slips	1,614	1,402	180
	Number of Facilities	10	6	1
2. San Francisco	Total Slips	14,741	10,827	1,604
	Number of Facilities	79	30	11
3. Central Coast	Total Slips	1,658	965	1,220
	Number of Facilities	12	2	5
4. South Coast	Total Slips	11,045	6,948	759
	Number of Facilities	40	19	4
5. San Diego	Total Slips	3,127	5,566	139
	Number of Facilities	16	15	5
6. Northern Interior	Total Slips	46	—	84
	Number of Facilities	1	—	2
7. Sacramento Basin	Total Slips	9,379	2,646	3,018
	Number of Facilities	95	10	35
8. Central Valley	Total Slips	4,445	840	2,147
	Number of Facilities	36	8	13
9. Eastern Sierra	Total Slips	473	—	96
	Number of Facilities	12	—	2
10. Southern Interior	Total Slips	2,189	250	1,121
	Number of Facilities	21	1	7
State Totals	**Total Slips**	**48,717**	**29,444**	**10,368**
	Total Count of Facilities	**322**	**91**	**85**

* Figures do not match regional totals because some facilities have more than one dock type and are double-counted in this table.

Table C2.6
Total Ten-Year Regional Upgrade Costs by Categories

Region	Upgrade Cost Categories	Costs	Percent of Total*
1. North Coast	Sum of Total Launch Ramp Upgrade Costs	$6,385,000	4%
	Sum of Total Dry Storage Upgrade Costs	895,000	4%
	Sum of Total Waterside Upgrade Costs	2,365,000	1%
	Sum of Total Landside Upgrade Costs	2,960,000	1%
2. San Francisco	Sum of Total Launch Ramp Upgrade Costs	$9,310,800	7%
	Sum of Total Dry Storage Upgrade Costs	3,660,800	15%
	Sum of Total Waterside Upgrade Costs	95,547,000	26%
	Sum of Total Landside Upgrade Costs	77,192,000	29%
3. Central Coast	Sum of Total Launch Ramp Upgrade Costs	$4,825,000	3%
	Sum of Total Dry Storage Upgrade Costs	1,076,500	4%
	Sum of Total Waterside Upgrade Costs	24,268,000	7%
	Sum of Total Landside Upgrade Costs	21,380,000	8%
4. South Coast	Sum of Total Launch Ramp Upgrade Costs	$31,076,000	22%
	Sum of Total Dry Storage Upgrade Costs	5,475,000	22%
	Sum of Total Waterside Upgrade Costs	159,205,003	44%
	Sum of Total Landside Upgrade Costs	86,985,000	32%
5. San Diego	Sum of Total Launch Ramp Upgrade Costs	$1,325,000	1%
	Sum of Total Dry Storage Upgrade Costs	4,120,000	16%
	Sum of Total Waterside Upgrade Costs	15,250,000	4%
	Sum of Total Landside Upgrade Costs	9,960,000	4%
6. Northern Interior	Sum of Total Launch Ramp Upgrade Costs	$384,000	<1%
	Sum of Total Dry Storage Upgrade Costs	—	—
	Sum of Total Waterside Upgrade Costs	140,000	—
	Sum of Total Landside Upgrade Costs	10,000	—
7. Sacramento Basin	Sum of Total Launch Ramp Upgrade Costs	$23,371,500	16%
	Sum of Total Dry Storage Upgrade Costs	4,812,000	19%
	Sum of Total Waterside Upgrade Costs	29,328,300	8%
	Sum of Total Landside Upgrade Costs	18,001,000	7%
8. Central Valley	Sum of Total Launch Ramp Upgrade Costs	$40,986,700	29%
	Sum of Total Dry Storage Upgrade Costs	3,496,600	14%
	Sum of Total Waterside Upgrade Costs	29,541,000	8%
	Sum of Total Landside Upgrade Costs	16,035,008	6%
9. Eastern Sierra	Sum of Total Launch Ramp Upgrade Costs	$683,000	<1%
	Sum of Total Dry Storage Upgrade Costs	200,000	1%
	Sum of Total Waterside Upgrade Costs	201,800	<1%
	Sum of Total Landside Upgrade Costs	675,000	<1%
10. Southern Interior	Sum of Total Launch Ramp Upgrade Costs	$24,197,000	17%
	Sum of Total Dry Storage Upgrade Costs	1,295,000	5%
	Sum of Total Waterside Upgrade Costs	6,435,000	2%
	Sum of Total Landside Upgrade Costs	36,949,500	14%
Total Sum of Launch Ramp Total Upgrade Costs		**$142,544,000**	**18%**
Total Sum of Total Dry Storage Upgrade Costs		**$25,030,900**	**3%**
Total Sum of Total Waterside Upgrade Costs		**$362,281,103**	**45%**
Total Sum of Total Landside Upgrade Costs		**$270,147,508**	**34%**
	Ten-Year Grand Total Upgrade Costs	**$800,003,511**	**100%**

* Percent of total upgrade costs for each category. Final percents are percent of grand total upgrade costs.

Table C2.7
Total Ten-Year Upgrade Costs for Public and Private Facilities by Region

a) Statewide Totals

Ownership	Upgrade Cost Categories	Total Costs
Public	Sum of Total Launch Ramp Upgrade Costs	$126,606,800
	Sum of Total Dry Storage Upgrade Costs	8,212,300
	Sum of Total Waterside Upgrade Costs	197,743,400
	Sum of Total Landside Upgrade Costs	111,985,000
Private	Sum of Total Launch Ramp Upgrade Costs	$15,937,200
	Sum of Total Dry Storage Upgrade Costs	16,818,600
	Sum of Total Waterside Upgrade Costs	164,537,703
	Sum of Total Landside Upgrade Costs	158,162,508
Total Sum of Launch Ramp Total Upgrade Costs		**$142,544,000**
Total Sum of Total Dry Storage Upgrade Costs		**$25,030,900**
Total Sum of Total Waterside Upgrade Costs		**$362,281,103**
Total Sum of Total Landside Upgrade Costs		**$270,147,508**

b) North Coast

Ownership	Upgrade Cost Categories	Total Costs
Public	Sum of Total Launch Ramp Upgrade Costs	$6,325,000
	Sum of Total Dry Storage Upgrade Costs	835,000
	Sum of Total Waterside Upgrade Costs	2,315,000
	Sum of Total Landside Upgrade Costs	2,860,000
Private	Sum of Total Launch Ramp Upgrade Costs	$60,000
	Sum of Total Dry Storage Upgrade Costs	60,000
	Sum of Total Waterside Upgrade Costs	50,000
	Sum of Total Landside Upgrade Costs	100,000
Total Sum of Launch Ramp Total Upgrade Costs		**$6,385,000**
Total Sum of Total Dry Storage Upgrade Costs		**$895,000**
Total Sum of Total Waterside Upgrade Costs		**$2,365,000**
Total Sum of Total Landside Upgrade Costs		**$2,960,000**

c) San Francisco

Ownership	Upgrade Cost Categories	Total Costs
Public	Sum of Total Launch Ramp Upgrade Costs	$5,735,800
	Sum of Total Dry Storage Upgrade Costs	1,125,800
	Sum of Total Waterside Upgrade Costs	73,487,000
	Sum of Total Landside Upgrade Costs	34,400,000
Private	Sum of Total Launch Ramp Upgrade Costs	$3,575,000
	Sum of Total Dry Storage Upgrade Costs	2,535,000
	Sum of Total Waterside Upgrade Costs	22,060,000
	Sum of Total Landside Upgrade Costs	42,792,000
Total Sum of Launch Ramp Total Upgrade Costs		**$9,310,800**
Total Sum of Total Dry Storage Upgrade Costs		**$3,660,800**
Total Sum of Total Waterside Upgrade Costs		**$95,547,000**
Total Sum of Total Landside Upgrade Costs		**$77,192,000**

Table C2.7 *(continued)*

d) Central Coast

Ownership	Upgrade Cost Categories	Total Costs
Public	Sum of Total Launch Ramp Upgrade Costs	$4,825,000
	Sum of Total Dry Storage Upgrade Costs	$1,076,500
	Sum of Total Waterside Upgrade Costs	$22,983,000
	Sum of Total Landside Upgrade Costs	$10,980,000
Private	Sum of Total Launch Ramp Upgrade Costs	—
	Sum of Total Dry Storage Upgrade Costs	—
	Sum of Total Waterside Upgrade Costs	$1,285,000
	Sum of Total Landside Upgrade Costs	10,400,000
Total Sum of Launch Ramp Total Upgrade Costs		**$4,825,000**
Total Sum of Total Dry Storage Upgrade Costs		**$1,076,500**
Total Sum of Total Waterside Upgrade Costs		**$24,268,000**
Total Sum of Total Landside Upgrade Costs		**$21,380,000**

e) South Coast

Ownership	Upgrade Cost Categories	Total Costs
Public	Sum of Total Launch Ramp Upgrade Costs	$28,460,000
	Sum of Total Dry Storage Upgrade Costs	2,470,000
	Sum of Total Waterside Upgrade Costs	71,995,000
	Sum of Total Landside Upgrade Costs	12,790,000
Private	Sum of Total Launch Ramp Upgrade Costs	$2,616,000
	Sum of Total Dry Storage Upgrade Costs	3,005,000
	Sum of Total Waterside Upgrade Costs	87,210,003
	Sum of Total Landside Upgrade Costs	74,195,000
Total Sum of Launch Ramp Total Upgrade Costs		**$31,076,000**
Total Sum of Total Dry Storage Upgrade Costs		**$5,475,000**
Total Sum of Total Waterside Upgrade Costs		**$159,205,003**
Total Sum of Total Landside Upgrade Costs		**$86,985,000**

f) San Diego

Ownership	Upgrade Cost Categories	Total Costs
Public	Sum of Total Launch Ramp Upgrade Costs	$1,275,000
	Sum of Total Dry Storage Upgrade Costs	85,000
	Sum of Total Waterside Upgrade Costs	200,000
	Sum of Total Landside Upgrade Costs	135,000
Private	Sum of Total Launch Ramp Upgrade Costs	$50,000
	Sum of Total Dry Storage Upgrade Costs	4,035,000
	Sum of Total Waterside Upgrade Costs	15,050,000
	Sum of Total Landside Upgrade Costs	9,825,000
Total Sum of Launch Ramp Total Upgrade Costs		**$1,325,000**
Total Sum of Total Dry Storage Upgrade Costs		**$4,120,000**
Total Sum of Total Waterside Upgrade Costs		**$15,250,000**
Total Sum of Total Landside Upgrade Costs		**$9,960,000**

Table C2.7 *(continued)*

g) Northern Interior

Ownership	Upgrade Cost Categories	Total Costs
Public	Sum of Total Launch Ramp Upgrade Costs	$354,000
	Sum of Total Dry Storage Upgrade Costs	—
	Sum of Total Waterside Upgrade Costs	—
	Sum of Total Landside Upgrade Costs	—
Private	Sum of Total Launch Ramp Upgrade Costs	$30,000
	Sum of Total Dry Storage Upgrade Costs	—
	Sum of Total Waterside Upgrade Costs	140,000
	Sum of Total Landside Upgrade Costs	10,000
Total Sum of Launch Ramp Total Upgrade Costs		**$384,000**
Total Sum of Total Dry Storage Upgrade Costs		
Total Sum of Total Waterside Upgrade Costs		**$140,000**
Total Sum of Total Landside Upgrade Costs		**$10,000**

h) Sacramento Basin

Ownership	Upgrade Cost Categories	Total Costs
Public	Sum of Total Launch Ramp Upgrade Costs	$19,287,000
	Sum of Total Dry Storage Upgrade Costs	300,000
	Sum of Total Waterside Upgrade Costs	3,967,400
	Sum of Total Landside Upgrade Costs	5,243,000
Private	Sum of Total Launch Ramp Upgrade Costs	$4,084,500
	Sum of Total Dry Storage Upgrade Costs	4,512,000
	Sum of Total Waterside Upgrade Costs	25,360,900
	Sum of Total Landside Upgrade Costs	12,758,000
Total Sum of Launch Ramp Total Upgrade Costs		**$23,371,500**
Total Sum of Total Dry Storage Upgrade Costs		**4,812,000**
Total Sum of Total Waterside Upgrade Costs		**29,328,300**
Total Sum of Total Landside Upgrade Costs		**18,001,000**

i) Central Valley

Ownership	Upgrade Cost Categories	Total Costs
Public	Sum of Total Launch Ramp Upgrade Costs	$36,856,000
	Sum of Total Dry Storage Upgrade Costs	870,000
	Sum of Total Waterside Upgrade Costs	18,515,000
	Sum of Total Landside Upgrade Costs	11,530,000
Private	Sum of Total Launch Ramp Upgrade Costs	$4,130,700
	Sum of Total Dry Storage Upgrade Costs	2,626,600
	Sum of Total Waterside Upgrade Costs	11,026,000
	Sum of Total Landside Upgrade Costs	4,505,008
Total Sum of Launch Ramp Total Upgrade Costs		**$40,986,700**
Total Sum of Total Dry Storage Upgrade Costs		**$3,496,600**
Total Sum of Total Waterside Upgrade Costs		**$29,541,000**
Total Sum of Total Landside Upgrade Costs		**$16,035,008**

Table C2.7 *(continued)*

j) Eastern Sierra

Ownership	Upgrade Cost Categories	Total Costs
Public	Sum of Total Launch Ramp Upgrade Costs	$216,000
	Sum of Total Dry Storage Upgrade Costs	200,000
	Sum of Total Waterside Upgrade Costs	121,000
	Sum of Total Landside Upgrade Costs	462,000
Private	Sum of Total Launch Ramp Upgrade Costs	$467,000
	Sum of Total Dry Storage Upgrade Costs	—
	Sum of Total Waterside Upgrade Costs	80,800
	Sum of Total Landside Upgrade Costs	213,000
Total Sum of Launch Ramp Total Upgrade Costs		**$683,000**
Total Sum of Total Dry Storage Upgrade Costs		**$200,000**
Total Sum of Total Waterside Upgrade Costs		**$201,800**
Total Sum of Total Landside Upgrade Costs		**$675,000**

k) Southern Interior

Ownership	Upgrade Cost Categories	Total Costs
Public	Sum of Total Launch Ramp Upgrade Costs	$23,273,000
	Sum of Total Dry Storage Upgrade Costs	1,250,000
	Sum of Total Waterside Upgrade Costs	4,160,000
	Sum of Total Landside Upgrade Costs	33,585,000
Private	Sum of Total Launch Ramp Upgrade Costs	$924,000
	Sum of Total Dry Storage Upgrade Costs	45,000
	Sum of Total Waterside Upgrade Costs	2,275,000
	Sum of Total Landside Upgrade Costs	3,364,500
Total Sum of Launch Ramp Total Upgrade Costs		**$24,197,000**
Total Sum of Total Dry Storage Upgrade Costs		**$1,295,000**
Total Sum of Total Waterside Upgrade Costs		**$6,435,000**
Total Sum of Total Landside Upgrade Costs		**$36,949,500**

Table C2.8
Launch Ramp Upgrade Costs – Frequency of Responses by Cost Range

a) Within 2 Years

Repair Cost	Number of Facilities
Up to $2,000	3
$2,001 to $5,000	8
$5,001 to $10,000	4
$10,001 to $25,000	14
$25,001 to $50,000	12
$50,001 to $100,000	11
$100,001 to $250,000	23
$250,001 to $500,000	16
$500,001 to $750,000	3
$750,001 to $1,000,000	5
$1,000,001 to $2,000,000	9
$2,000,001 to $3,000,000	1
Over $3,000,000	1
Total	110

b) Within 2 to 5 Years

Repair Cost	Number of Facilities
Up to $2,000	6
$2,001 to $5,000	8
$5,001 to $10,000	6
$10,001 to $25,000	11
$25,001 to $50,000	14
$50,001 to $100,000	23
$100,001 to $250,000	12
$250,001 to $500,000	11
$500,001 to $750,000	0
$750,001 to $1,000,000	8
$1,000,001 to $2,000,000	3
$2,000,001 to $3,000,000	2
$3,000,001 to $5,000,000	1
Over $5,000,000	1
Total	106

c) Within 5 to 10 Years

Repair Cost	Number of Facilities
Up to $2,000	0
$2,001 to $5,000	7
$5,001 to $10,000	2
$10,001 to $25,000	11
$25,001 to $50,000	8
$50,001 to $100,000	11
$100,001 to $250,000	15
$250,001 to $500,000	11
$500,001 to $750,000	0
$750,001 to $1,000,000	1
$1,000,001 to $2,000,000	6
$2,000,001 to $3,000,000	2
$3,000,001 to $5,000,000	3
Over $5,000,000	1
Total	78

Table C2.9
Dry Storage Upgrade Costs – Frequency of Responses by Cost Range

a) Within 2 Years

Repair Cost	Number of Facilities
Up to $2,000	2
$2,001 to $5,000	3
$5,001 to $10,000	1
$10,001 to $25,000	4
$25,001 to $50,000	10
$50,001 to $75,000	1
$75,001 to $100,000	3
$100,001 to $250,000	4
$250,001 to $500,000	6
$500,001 to $750,000	0
$750,001 to $1,000,000	1
$1,000,001 to $2,000,000	2
Over $2,000,000	0
Total	37

b) Within 2 to 5 Years

Repair Cost	Number of Facilities
Up to $2,000	2
$2,001 to $5,000	2
$5,001 to $10,000	3
$10,001 to $25,000	4
$25,001 to $50,000	3
$50,001 to $75,000	1
$75,001 to $100,000	4
$100,001 to $250,000	9
$250,001 to $500,000	6
$500,001 to $750,000	1
$750,001 to $1,000,000	3
$1,000,001 to $2,000,000	0
Over $2,000,000	0
Total	38

c) Within 5 to 10 Years

Repair Cost	Number of Facilities
Up to $2,000	1
$2,001 to $5,000	1
$5,001 to $10,000	1
$10,001 to $25,000	1
$25,001 to $50,000	1
$50,001 to $75,000	1
$75,001 to $100,000	2
$100,001 to $250,000	2
$250,001 to $500,000	5
$500,001 to $750,000	0
$750,001 to $1,000,000	2
$1,000,001 to $2,000,000	0
Over $2,000,000	1
Total	18

Table C2.10
Wet Storage Waterside Upgrade Costs – Frequency of Responses by Cost Range

a) Within 2 Years

Repair Cost	Number of Facilities
Up to $2,000	4
$2,001 to $5,000	9
$5,001 to $10,000	7
$10,001 to $25,000	20
$25,001 to $50,000	17
$50,001 to $100,000	22
$100,001 to $250,000	21
$250,001 to $500,000	25
$500,001 to $750,000	2
$750,001 to $1,000,000	6
$1,000,001 to $2,000,000	11
$2,000,001 to $3,000,000	4
$3,000,001 to $5,000,000	3
$5,000,001 to $7,500,000	1
$7,500,001 to $10,000,000	1
Over $10,000,000	0
Total	153

b) Within 2 to 5 Years

Repair Cost	Number of Facilities
Up to $2,000	4
$2,001 to $5,000	2
$5,001 to $10,000	10
$10,001 to $25,000	6
$25,001 to $50,000	17
$50,001 to $100,000	16
$100,001 to $250,000	27
$250,001 to $500,000	13
$500,001 to $750,000	2
$750,001 to $1,000,000	7
$1,000,001 to $2,000,000	3
$2,000,001 to $3,000,000	5
$3,000,001 to $5,000,000	2
$5,000,001 to $7,500,000	2
$7,500,001 to $10,000,000	2
Over $10,000,000	4
Total	122

c) Within 5 to 10 Years

Repair Cost	Number of Facilities
Up to $2,000	2
$2,001 to $5,000	1
$5,001 to $10,000	5
$10,001 to $25,000	7
$25,001 to $50,000	9
$50,001 to $100,000	17
$100,001 to $250,000	14
$250,001 to $500,000	5
$500,001 to $750,000	0
$750,001 to $1,000,000	2
$1,000,001 to $2,000,000	1
$2,000,001 to $3,000,000	3
$3,000,001 to $5,000,000	3
$5,000,001 to $7,500,000	1
$7,500,001 to $10,000,000	2
Over $10,000,000	1
Total	73

Table C2.11
Wet Storage Landside Upgrade Costs – Frequency of Responses by Cost Range

a) Within 2 Years

Repair Cost	Number of Facilities
Up to $2,000	0
$2,001 to $5,000	6
$5,001 to $10,000	7
$10,001 to $25,000	11
$25,001 to $50,000	16
$50,001 to $100,000	15
$100,001 to $250,000	23
$250,001 to $500,000	19
$500,001 to $750,000	5
$750,001 to $1,000,000	14
$1,000,001 to $2,000,000	5
$2,000,001 to $3,000,000	4
$3,000,001 to $5,000,000	1
$5,000,001 to $7,500,000	0
$7,500,001 to $10,000,000	1
Over $10,000,000	2
Total	129

b) Within 2 to 5 Years

Repair Cost	Number of Facilities
Up to $2,000	0
$2,001 to $5,000	3
$5,001 to $10,000	3
$10,001 to $25,000	9
$25,001 to $50,000	5
$50,001 to $100,000	13
$100,001 to $250,000	22
$250,001 to $500,000	11
$500,001 to $750,000	1
$750,001 to $1,000,000	5
$1,000,001 to $2,000,000	8
$2,000,001 to $3,000,000	1
$3,000,001 to $5,000,000	1
$5,000,001 to $7,500,000	1
$7,500,001 to $10,000,000	1
Over $10,000,000	1
Total	85

c) Within 5 to 10 Years

Repair Cost	Number of Facilities
Up to $2,000	0
$2,001 to $5,000	0
$5,001 to $10,000	4
$10,001 to $25,000	11
$25,001 to $50,000	8
$50,001 to $100,000	10
$100,001 to $250,000	15
$250,001 to $500,000	6
$500,001 to $750,000	1
$750,001 to $1,000,000	3
$1,000,001 to $2,000,000	4
$2,000,001 to $3,000,000	3
$3,000,001 to $5,000,000	3
$5,000,001 to $7,500,000	2
$7,500,001 to $10,000,000	0
Over $10,000,000	1
Total	71

Table C2.12
Annual Facility Maintenance Costs by Slip Capacity and Region

a) 50 Slips or Less

Facility Count within Maintenance Range	Maintenance Range				
Region	**<$10,000**	**>$10,000 to $25,000**	**>$25,000 to $100,000**	**>$100,000 to $750,000**	**Total**
San Francisco Bay	2	1	1	—	4
Central Coast	1	—	1	—	2
South Coast	—	1	1	—	2
San Diego	—	—	—	1	1
Northern Interior	—	—	1	—	1
Sacramento Basin	4	1	—	—	5
Central Valley	2	3	—	—	5
Eastern Sierra	1	1	—	—	2
Total	**10**	**7**	**4**	**1**	**22**

b) 50 to 100 Slips

Facility Count within Maintenance Range	Maintenance Range					
Region	**<$10,000**	**>$10,000 to $25,000**	**>$25,000 to $100,000**	**>$100,000 to $750,000**	**>$750,000 to $2,500,000**	**Total**
San Francisco Bay	1	—	1	—	—	2
Central Coast	—	—	—	1	—	1
South Coast	—	—	3	1	—	4
San Diego	—	2	—	—	—	2
Sacramento Basin	1	—	1	—	1	3
Central Valley	1	—	1	1	—	3
Total	**3**	**2**	**6**	**3**	**1**	**15**

c) 100 to 200 Slips

Facility Count within Maintenance Range	Maintenance Range					
Region	**<$10,000**	**>$10,000 to $25,000**	**>$25,000 to $100,000**	**>$100,000 to $750,000**	**>$750,000 to $2,500,000**	**Total**
San Francisco Bay	—	1	1	—	—	2
Central Coast	—	—	—	1	1	2
San Diego	2	1	—	—	—	3
Sacramento Basin	1	—	2	—	—	3
Central Valley	1	—	1	—	—	2
Southern Interior	—	—	—	1	—	1
Total	**4**	**2**	**4**	**2**	**1**	**13**

Table C2.12 *(continued)*

d) 200 to 400 Slips

Facility Count within Maintenance Range	Maintenance Range			
Region	**>$25,000 to $100,000**	**>$100,000 to $750,000**	**>$750,000 to $2,500,000**	**Total**
San Francisco Bay	3	—	—	3
South Coast	1	—	—	1
Central Valley	2	—	1	3
Eastern Sierra	—	1	—	1
Total	**6**	**1**	**1**	**8**

e) 400 to 700 Slips

Facility Count within Maintenance Range	Maintenance Range		
Region	**>$100,000 to $750,000**	**>$750,000 to $2,500,000**	**Total**
San Francisco Bay	5	—	5
South Coast	2	—	2
San Diego	3	—	3
Sacramento Basin	2	—	2
Central Valley	—	1	1
Total	**12**	**1**	**13**

f) 700 to 1,000 Slips

Facility Count within Maintenance Range	Maintenance Range			
Region	**>$25,000 to $100,000**	**>$100,000 to $750,000**	**>$750,000 to $2,500,000**	**Total**
San Francisco Bay	—	—	1	1
Central Coast	—	—	1	1
South Coast	1	1	—	2
Sacramento Basin	1	—	—	1
Total	**2**	**1**	**2**	**5**

g) 1,000 Slips

Facility Count within Maintenance Range	Maintenance Range		
Region	**>$100,000 to $750,000**	**>$2,500,000**	**Total**
South Coast	1	1	2
Total	**1**	**1**	**2**

Table C2.13
Facility Need Requests from Facility Survey

Code	Facility Need	Frequency 1	Frequency 2	Frequency 3	Total	Percent of Total
9	Dredging	49	21	7	77	6.6%
5	Parking capacity	26	22	12	60	5.2%
11	Launching capacity	28	17	12	57	4.9%
32	Needs boat slips	40	9	5	54	4.7%
2	Better waste pump out	18	24	8	50	4.3%
12	Facility repairs: docks	15	18	9	42	3.6%
40	Needs a gas pump station/improve current station	10	10	14	34	2.9%
19	Add docks	16	8	9	33	2.8%
17	Better restrooms	8	15	10	33	2.8%
208	Larger boat slips	19	7	5	31	2.7%
213	More dry storage	12	10	8	30	2.6%
37	More law enforcement	10	6	9	25	2.2%
41	General facility improvements	7	13	5	25	2.2%
92	Transient slips/guest docks	10	11	3	24	2.1%
48	Maintain water level	13	5	3	21	1.8%
8	Facility repairs: ramp	10	6	2	18	1.6%
61	Longer/steeper launch ramp	10	5	2	17	1.5%
26	More public access	6	6	3	15	1.3%
54	Remove invasive species	9	2	3	14	1.2%
146	Add facilities	5	7	2	14	1.2%
84	Additional funding	5	5	4	14	1.2%
38	Improve/add breakwater	8	3	2	13	1.1%
31	Make wheelchair accessible facilities	8	2	3	13	1.1%
43	Another boat repair shop	6	6	1	13	1.1%
23	Mooring buoys	5	5	3	13	1.1%
22	Access road improved	1	5	7	13	1.1%
13	Campgrounds/improve campgrounds	7	2	3	12	1.0%
49	More marinas	7	1	3	11	0.9%
16	Waterfront restaurants	4	5	2	11	0.9%
27	Improve water quality	4	4	3	11	0.9%
136	Safety courses	4	5	1	10	0.9%
1	More capacity (general or unspecified)	2	2	6	10	0.9%
62	Buoy markers	5	2	2	9	0.8%
179	Paved parking lot	3	3	3	9	0.8%
118	Fish cleaning facilities	4	1	3	8	0.7%
18	Electricity	4	0	4	8	0.7%
122	Add RV area	3	5	0	8	0.7%
45	Picnic areas	0	4	4	8	0.7%
157	More liveaboard permits/facilities	3	3	1	7	0.6%
251	Fishing docks/trails	2	2	3	7	0.6%
200	Repair parking lots	1	4	2	7	0.6%
51	Boat storage facility	0	5	2	7	0.6%
206	Less restrictions on dredging and maintenance	4	1	1	6	0.5%
207	Snack bar/dock bars	3	2	1	6	0.5%
50	Showers	3	1	2	6	0.5%
252	Haul out facilities	0	4	2	6	0.5%
10	Security	2	2	1	5	0.4%

Table C2.13 *(continued)*

Code	Facility Need	Frequency 1	Frequency 2	Frequency 3	Total	Percent of Total
265	Improve shore access/marina services	2	1	2	5	0.4%
34	Need specialty retail/supplies	0	4	1	5	0.4%
21	Crowd control	3	1	0	4	0.3%
205	Canoe/nonmotorized craft launch	3	1	0	4	0.3%
52	Needs to be cleaned up	3	0	1	4	0.3%
165	Swimming area	3	0	1	4	0.3%
246	Mobile pumpout station	3	0	1	4	0.3%
209	New law enforcement facilities/equipment	2	2	0	4	0.3%
65	Rentals	1	2	1	4	0.3%
222	Government cooperation	1	2	1	4	0.3%
14	Floating bathrooms	1	1	2	4	0.3%
131	Prohibit/Restrict PWC use	1	1	2	4	0.3%
230	Enforce waste dumping laws	1	0	3	4	0.3%
158	Needs running water	0	2	2	4	0.3%
244	Additional cable for the low water dock	0	1	3	4	0.3%
162	Less environmental restrictions	1	2	0	3	0.3%
233	Add a pier	1	2	0	3	0.3%
274	Hazardous waste disposal	1	2	0	3	0.3%
15	Covered storage	1	1	1	3	0.3%
25	Floating bathrooms	1	1	1	3	0.3%
85	Beach area	1	1	1	3	0.3%
195	Laundry facilities	1	1	1	3	0.3%
282	Pilings replaced	1	1	1	3	0.3%
36	Install marine travel lift	0	2	1	3	0.3%
234	Reinforce shoreline	0	2	1	3	0.3%
266	Boarding floats	0	2	1	3	0.3%
56	Improve fishing	0	1	2	3	0.3%
98	Additional lighting	0	1	2	3	0.3%
105	Publicize facilities	0	1	2	3	0.3%
30	Free access	2	0	0	2	0.2%
119	Increase water level	2	0	0	2	0.2%
210	Review boat size limits	2	0	0	2	0.2%
229	Marina configuration outdated	2	0	0	2	0.2%
29	More motels and hotels	1	1	0	2	0.2%
88	More commercial boating facilities	1	1	0	2	0.2%
232	Use electric motors	1	1	0	2	0.2%
57	Remove floating debris	1	0	1	2	0.2%
63	Plant grass/landscaping	1	0	1	2	0.2%
64	Decrease government involvement	1	0	1	2	0.2%
134	Do not cut back services/more services	0	2	0	2	0.2%
196	Day use access	0	2	0	2	0.2%
219	Decrease Coastal Commission interference	0	2	0	2	0.2%
242	A cartop boat launch	0	2	0	2	0.2%
258	System to enforce no wake zone	0	2	0	2	0.2%
267	Repair boathouse	0	2	0	2	0.2%
39	Install freshwater boat wash area	0	1	1	2	0.2%
247	New patrol boat	0	1	1	2	0.2%
250	Low interest loans for marina owners	0	1	1	2	0.2%
260	Secure area to store rental boats	0	1	1	2	0.2%

Table C2.13 (continued)

Code	Facility Need	Frequency 1	Frequency 2	Frequency 3	Total	Percent of Total
268	Emergency services/equipment	0	1	1	2	0.2%
95	Repair pier	0	0	2	2	0.2%
227	Playgrounds	0	0	2	2	0.2%
243	Facility has staffing concerns	0	0	2	2	0.2%
58	More harbor refuge along the coast	1	0	0	1	0.1%
70	Pave launch ramps	1	0	0	1	0.1%
73	Ramp has steep grade	1	0	0	1	0.1%
104	Boating destinations	1	0	0	1	0.1%
126	Ferry services/ferry to moored boats	1	0	0	1	0.1%
138	More man-made lakes	1	0	0	1	0.1%
152	Alternate days for boater and PWC use	1	0	0	1	0.1%
204	Safer launch ramps	1	0	0	1	0.1%
211	Less building restrictions	1	0	0	1	0.1%
212	Recycling needs	1	0	0	1	0.1%
223	More environmental regulations	1	0	0	1	0.1%
228	Lower cost dredging contractors	1	0	0	1	0.1%
231	More patio boats	1	0	0	1	0.1%
253	Flood control	1	0	0	1	0.1%
255	Change lease agreements to allow for extensions	1	0	0	1	0.1%
256	More houseboat permits	1	0	0	1	0.1%
263	Noise control	1	0	0	1	0.1%
264	Low water access to the marina	1	0	0	1	0.1%
271	Facility for the disposal of abandoned boats	1	0	0	1	0.1%
272	Needs new lease	1	0	0	1	0.1%
273	Signage	1	0	0	1	0.1%
279	Reclaim shoreline	1	0	0	1	0.1%
280	More fishermen	1	0	0	1	0.1%
281	More boaters	1	0	0	1	0.1%
283	Grants for improvements	1	0	0	1	0.1%
284	New mooring lines	1	0	0	1	0.1%
3	Longer operating hours	0	1	0	1	0.1%
7	Separate area for PWCs	0	1	0	1	0.1%
33	Decrease usage fees	0	1	0	1	0.1%
60	Emergency phones	0	1	0	1	0.1%
66	Larger houseboats/boats	0	1	0	1	0.1%
72	Information about other facilities	0	1	0	1	0.1%
93	Repair levee	0	1	0	1	0.1%
100	Remove submerged obstacles	0	1	0	1	0.1%
103	Speed limits	0	1	0	1	0.1%
121	Remove abandoned boats	0	1	0	1	0.1%
124	Prohibit alcohol consumption while operating a boat	0	1	0	1	0.1%
130	Allow PWC use	0	1	0	1	0.1%
151	Fair use for all boaters	0	1	0	1	0.1%
176	Boating license	0	1	0	1	0.1%
199	Public environmental education	0	1	0	1	0.1%
215	Improve boat wash area	0	1	0	1	0.1%
216	Pile replacements	0	1	0	1	0.1%
217	Destination resort	0	1	0	1	0.1%
218	Improve access to dock repairmen	0	1	0	1	0.1%

Table C2.13 (continued)

Code	Facility Need	Frequency 1	Frequency 2	Frequency 3	Total	Percent of Total
220	Approval for shore power hookups	0	1	0	1	0.1%
221	Higher level of construction standards for docks	0	1	0	1	0.1%
235	Night fishing	0	1	0	1	0.1%
236	Better maintenance for rental boats	0	1	0	1	0.1%
237	Enable law enforcement to deal with illegally moored boats	0	1	0	1	0.1%
238	Strengthen landlord rights	0	1	0	1	0.1%
239	Dive shop	0	1	0	1	0.1%
240	Address liveaboard situation	0	1	0	1	0.1%
241	Regulate bottom paint	0	1	0	1	0.1%
249	More walkways	0	1	0	1	0.1%
254	Simplify permit process	0	1	0	1	0.1%
257	Less anchor outs	0	1	0	1	0.1%
42	New access channel	0	0	1	1	0.1%
47	More trash cans	0	0	1	1	0.1%
87	Plant trees	0	0	1	1	0.1%
90	More yacht clubs	0	0	1	1	0.1%
97	Better sewer system	0	0	1	1	0.1%
117	Restrict development	0	0	1	1	0.1%
128	Stop exporting water	0	0	1	1	0.1%
159	Hire more staff	0	0	1	1	0.1%
188	Allow two-stroke engines	0	0	1	1	0.1%
214	Funding to deal with derelict vessels	0	0	1	1	0.1%
224	Facility has excess capacity	0	0	1	1	0.1%
225	More skilled labor in region	0	0	1	1	0.1%
226	Concerned about marina fuel regulations	0	0	1	1	0.1%
245	Oil disposal	0	0	1	1	0.1%
248	Revenue generation to provide maintenance	0	0	1	1	0.1%
259	Public/private partnership to recycle hazardous materials	0	0	1	1	0.1%
261	Vessel assistance service	0	0	1	1	0.1%
262	Less commercial fishing	0	0	1	1	0.1%
269	Do not require permit to have boat on lake	0	0	1	1	0.1%
270	Fishing license does not have to be visible	0	0	1	1	0.1%
275	Cruise ship facilities	0	0	1	1	0.1%
276	Inspect engines for leaks	0	0	1	1	0.1%
277	Shade awning	0	0	1	1	0.1%
278	Phones	0	0	1	1	0.1%
		491	395	272	1,158	100.0%

Table C2.14
Facility Survey Final Open Comments

Code	Final Comment	Frequency	Percent of Total
0	None	290	49.1%
26	Boating safety courses/licenses	22	3.7%
306	DBW is very supportive	21	3.6%
305	Easier access to dredging/expansion permits	13	2.2%
16	Additional boating facilities	10	1.7%
41	Additional funding for boating facility improvements	10	1.7%
316	DBW should help with dredging costs	9	1.5%
7	General facility improvements	7	1.2%
46	Dredging	7	1.2%
8	Launching capacity/more ramps	6	1.0%
23	Better waste pump-out stations	6	1.0%
35	Waterways are good	6	1.0%
4	More law enforcement	5	0.8%
17	Additional marinas	5	0.8%
33	Gas pumps stations needed	5	0.8%
112	Transient slips/docks	5	0.8%
1	Cleaner waterways	4	0.7%
11	Private facilities instead of government facilities	4	0.7%
15	Insufficient water level	4	0.7%
48	Prohibit/restrict PWC use	4	0.7%
50	Invasive species control	4	0.7%
124	More liberal liveaboard policies	4	0.7%
145	Remove floating debris	4	0.7%
312	Give funds to established facilities and not just new marinas	4	0.7%
315	Dry storage	4	0.7%
3	More parking capacity	3	0.5%
12	Overcrowding	3	0.5%
27	Improved breakwater	3	0.5%
40	More slips	3	0.5%
44	Stop exporting water	3	0.5%
104	More effective services from government departments	3	0.5%
219	ADA compliant facilities	3	0.5%
304	Facility currently up for sale	3	0.5%
308	Remove derelict boats	3	0.5%
323	Demand finally meeting supply/maintain balance	3	0.5%
13	Concerned about usage fees	2	0.3%
20	MTBE problem	2	0.3%
39	Use boating tax revenues for facility improvements	2	0.3%
57	Review loan/grant program	2	0.3%
60	Decrease noise level/noise limits	2	0.3%
75	Repair ramps	2	0.3%
98	Information on facilities	2	0.3%
128	Dock maintenance	2	0.3%
184	Specialty stores	2	0.3%
186	Less environmental restrictions	2	0.3%
259	RV access	2	0.3%
289	Covered berths	2	0.3%

Table C2.14 *(continued)*

Code	Final Comment	Frequency	Percent of Total
302	Have professional marina operators review survey, some things did not make any sense	2	0.3%
307	Non-motorized boating areas	2	0.3%
311	Less stringent regulations for marina facilities	2	0.3%
318	Wants to expand facility	2	0.3%
320	Good loan/grant program	2	0.3%
332	DBW should spread funds evenly between large and small communities	2	0.3%
335	Information on boating laws/user conflict resolution	2	0.3%
2	More public access	1	0.2%
6	More environmental regulations/Protect natural habitat	1	0.2%
29	Age restriction	1	0.2%
31	Remove/reduce boating restrictions	1	0.2%
37	Speed limits	1	0.2%
42	Add docks	1	0.2%
49	Separate PWC area	1	0.2%
56	Decrease government involvement	1	0.2%
62	More emphasis on commercial fishing	1	0.2%
66	Boating restrictions	1	0.2%
82	Restaurants	1	0.2%
84	Senior citizen reduced fishing/boating fee	1	0.2%
85	More trees	1	0.2%
87	Mooring buoys	1	0.2%
92	Enforce life jacket use	1	0.2%
93	Better restrooms	1	0.2%
94	More liveaboard facilities	1	0.2%
117	More hours/time of availability	1	0.2%
123	Don't close facilities for environmental reasons	1	0.2%
140	Fair use for all boaters	1	0.2%
142	Anyone under 16/18 mandatory life jacket	1	0.2%
158	River access	1	0.2%
159	Separate fishing areas	1	0.2%
160	Do not close boat yards to build hotels	1	0.2%
165	Better access for kayakers	1	0.2%
168	Should provide compensation if they outlaw two-stroke engines	1	0.2%
198	Storage facilities	1	0.2%
223	Do not restrict fishing	1	0.2%
224	Issue harbor guides "ABC's of boating"	1	0.2%
234	Control seal/sea lion population	1	0.2%
241	Repair levees	1	0.2%
249	Mark submerged obstacles	1	0.2%
258	Disposal of used gas/toxic materials a problem	1	0.2%
296	Boating destinations	1	0.2%
301	Failing shoreline	1	0.2%
303	Carry down walkways	1	0.2%
309	Improve legal options for marina operators in dealing with problem tenants	1	0.2%
310	Set regulations according to facility size	1	0.2%
313	Female marina owners alliance	1	0.2%
314	Survey during the off-season	1	0.2%
317	Referral service for boating instructors	1	0.2%

Table C2.14 *(continued)*

Code	Final Comment	Frequency	Percent of Total
319	Metered electricity	1	0.2%
321	Speed of funds request	1	0.2%
322	Shared security	1	0.2%
324	Focus on recreational boater needs	1	0.2%
325	DBW website to include info on each facility	1	0.2%
326	Quarterly newsletter for facilities	1	0.2%
328	Fishing pathway	1	0.2%
329	Wants information on grant program	1	0.2%
330	Larger parking lots to provide room for bigger boats	1	0.2%
331	Survey users for facility needs	1	0.2%
333	Facilities destroyed by fire	1	0.2%
334	Change funding calculations	1	0.2%
336	Larger slips	1	0.2%
337	Funding for search and rescue	1	0.2%
338	Disapproves of funding going to museum	1	0.2%
339	Loan application assistance	1	0.2%
340	Appreciates clean water program	1	0.2%
341	Listen to boaters' needs	1	0.2%
342	Low water facilities	1	0.2%
		591	100.0%

Table C2.15
Examples of Final Comments

- Keep the government out of the boat storage business, including marinas. If the private sector can provide a marina, why do they need to be in business?
- More public launch facilities on fresh water reservoirs are needed. Expedition of funding requests is another thing.
- If California had a class on operating a boat safely, I would support that. It's badly needed.
- It would be nice if the permit process to dredge didn't take years. And, that approval for expansion did not take years.
- A problem would be abandoned boats, and would like to get rid of them. Not enough funding for getting rid of them. Also not enough funding for people who deal with commercial boating facilities, since funding goes mostly to recreational boating facilities.
- Continue to go to the facility operators and boaters to discover emerging needs.
- DBW should be the clearinghouse agency for both State and Federal funds to disburse to all public marinas. This should be used to deal with the dredging needs of marinas, and dredging costs should not be completely saddled onto the berthing fees for individuals.
- Need larger slips and expand the liveaboards.
- More transient docks throughout the Coast, especially the south, near San Diego. She considers increased transient boating to be a trend; having been involved with the marina for twenty years, now she deals with more people than previously have asked for the biggest problem is going to be water quality issues—pollution issues such as storm drain outfalls and urban runoff.
- Grant program needs to be improved; track & follow up on dollar use.
- I really like the DBW. They did help with us before and I think it's wonderful that they help finance the patrolling of the lake.
- Probably to have stricter laws on jetskis, waverunners and really big boats.
- Improved State Funding is needed for capital improvements.
- Need underwater obstacle marking saves thousands of dollars in damages to people's boats.
- I need help completing forms for DBW funding.
- The boating facility industry is under attack by the environmental groups that are trying to reduce fishing areas, number of boats in harbors and bays and generally threatening the industry.
- I think we need more pump-out stations and more common sense approach towards bilge and waste oil disposal.
- We were assisted in getting a grant for our pump-out facility by DBW from the Feds. It was fantastic.
- If there are no more marinas, then the cost of boating will go so high that it will be boating only for the rich.
- I'd like to see them [DBW] expand their website to include marina or boating information for throughout the state. And, also, have a quarterly publication mailed to boating facilities.
- We've got more boats than we've got places to put them. More docking facilities are what we need.
- In all my travels, the DBW-sponsored improvements are some of the best in the country. Keep up the good work.
- The red tape that the government causes makes it impossible to make any money and do the improvements necessary. It's just too cost-prohibitive. It takes way too long to get permits.
- The amount of boaters is overwhelming; there is a tremendous need for public access to the water. Also keeping public facilities open is a real key.
- We need facilities for personal watercraft launching, so they're not in conflict with recreational boaters, and some financial support for public safety & aquatic safety programs on reservoirs.
- There is a big need for handicapped accessibility in our area.
- Continued care and upkeep to prevent severe deterioration (such as occurred at this facility). This will reduce annual maintenance costs and also provide safe facilities.
- Money should be spent on non-power reservoir issues, improving ramps and docks.
- Stop giving government so much of their money.

Appendix C3
California Boating Facilities Survey

California Boating Facility Information Sheet

California Boating Facility Survey *(Mail Version)*

California Boating Facilities Survey

Mail Survey

This survey is part of the California Department of Boating and Waterways (DBW) California Boating Facility Needs Assessment. The information gathered through this facility survey, as well as through public workshops and surveys of boaters and law enforcement officers, will help the DBW develop projections on statewide facility needs and allocate funding for DBW's grant and loan programs over the next five years. Results of the study will be available on the DBW web page next summer at www.dbw.ca.gov. This survey covers information about the capacity, occupancy, prices, services and capital improvement needs of boating facilities. Over the last several months DBW has been conducting telephone surveys of facilities throughout the state. This written version of the survey is provided as a service to those who are unable to answer the questions by telephone. Question numbering is designed to match the telephone survey system, and may not always be sequential. Please answer the questions to the best of your ability for the facility identified below, and return the survey in the enclosed envelope by December 15, 2001 to:

California Boating Needs Assessment
CSU Sacramento
Solano Hall 4000
6000 J Street
Sacramento, CA 95819-6110

If you have any questions, or would rather respond to the survey by telephone, please call the CSUS Boating Needs Assessment office at 916-278-4867.

Please verify and make corrections to the following information about this facility:

Facility Name: _____

Your Name: _____

Facility Address: _____

Mailing address if different: _____

Facility telephone number: _____

County: _____

Body of Water where facility is located: _____

Facility web page address: _____

QUESTION #17
And are you the owner, operator, manager or harbor master of this facility? CIRCLE ALL THAT APPLY

<1> OWNER
<2> OPERATOR
<3> MANAGER
<4> HARBOR MASTER
<5> OTHER (*Specify title* _____)

QUESTION #27
Is this a GOVERNMENT or NON-GOVERNMENT (i.e. privately-owned) facility. CIRCLE ONE

QUESTION #28
If this is a government facility, is this facility operated by the public agency that owns it?

<1> YES <2> NO <8> DON'T KNOW

QUESTION #29
Who is allowed to use your facility? CIRCLE ALL THAT APPLY

<1> General public
<2> Club members only
<3> OTHER (*Specify* _____)
<8> DON'T KNOW

QUESTION #33
Do you have any trailer or cartop boat launching facilities?

<1> YES <2> NO <8> DON'T KNOW

*** QUESTION #34***
Do you have any dry boat storage facilities?

<1> YES <2> NO <8> DON'T KNOW

QUESTION #35
Do you have any boat storage docks or moorings?

<1> YES <2> NO <8> DON'T KNOW

QUESTION #36
This questions lists many types of facilities and support features. Please CIRCLE EACH of the following facilities or services that you provide to your customers.

<1> Restrooms
<2> Showers
<3> Carry-down walkways
<4> Sewage or bilge pumpout
<5> Fuel sales
<6> Shore boat service
<7> Launching valet service
<8> Campsites
<9> Day-use or picnic areas
<10> Snack bar
<11> Oil disposal
<12> Boat rentals
<13> Convenience store
<14> Haulout and boat repair
<15> Swimming area
<16> Fishing tackle sales
<17> Ice vending
<18> Gear lockers
<19> Lodging
<20> Restaurant
<21> Fish cleaning
<22> Boat washdown area
<23> Transient berths or tie-ups
<24> Water on dock
<25> Electric on dock
<26> Phone service on dock
<27> Cable TV on dock
<28> Laundry

Please answer questions #37 through #42 if this facility has one or more launch ramps (a yes answer to QUESTION #33), if not, skip to question #43.

QUESTION #37
Enter the appropriate number for each of the following:

<1> How many launch ramp lanes are usable at any one time? _____

<2> How many parking spaces do you have for cars with trailers?_____

<3> How many boarding floats do you have? _____

<4> How many carry-down walkways? _____

QUESTION #38
How often do the launch ramp lanes or parking spaces at your facility fill to capacity? CIRCLE ONE

<1> Never
<2> 1 to 15 times per year, or
<3> More than 15 times per year?
<8> DON'T KNOW

QUESTION #39
Considering the boundaries of your property, is there room to expand your launching facilities?

<1> YES <2> NO <8> DON'T KNOW

QUESTION #40
Do your launching facilities need to be expanded?

<1> YES <2> NO <8> DON'T KNOW

QUESTIONS #41 AND #42
Considering launching facility improvements, does any part of your launching facility and related support features require upgrades such as repair, replacement, expansion or addition? To answer this question, please use the table below to specify whether upgrades are required and if so, the approximate cost, for each of three time periods:

Time Period	Upgrades Needed? CIRCLE ONE			If yes, enter the approximate cost
A. Within Next Two Years	Yes	No	Don't Know	
B. Within 2 to 5 Years	Yes	No	Don't Know	
C. Within 5 to 10 Years	Yes	No	Don't Know	

Please answer questions #43 through #52 if your facility has dry storage (a yes answer to QUESTION #34), if not, skip to question # 53.

QUESTION #43
What is your total capacity for dry boat storage?

<1> ENTER CAPACITY:_____
<8> DON'T KNOW

QUESTION #45
How many of these spaces are currently occupied?

<1> ENTER CAPACITY:_____
<2> ALL
<3> NONE
<8> DON'T KNOW

QUESTION #47
What is the typical monthly rate for dry storage?

<1> ENTER RATE PER FOOT: _____ or
<2> ENTER RATE PER SPACE: _____
<8> DON'T KNOW

QUESTION #49
Considering the boundaries of your property, is there room to expand your dry storage facilities?

<1> YES <2> NO <8> DON'T KNOW

QUESTION #50
Do your dry storage facilities need to be expanded?

<1> YES <2> NO <8> DON'T KNOW

QUESTIONS #51 AND #52
Considering any dry storage facility improvements that could be made, does any part of your dry storage facility or support features require upgrades such as repair, replacement, expansion or addition? To answer this question, please use the table below to specify whether upgrades are required and if so, the approximate cost, for each of three time periods:

Time Period	**Upgrades Needed?** CIRCLE ONE			**If yes, enter the approximate cost**
A. Within Next Two Years	Yes	No	Don't Know	
B. Within 2 to 5 Years	Yes	No	Don't Know	
C. Within 5 to 10 Years	Yes	No	Don't Know	

Please answer questions #53 through #121 if your facility has berths or moorings (a yes answer to QUESTION #35), if not skip to question #122.

QUESTION #53
What size boats generally use the facility?

<1> SHORTEST BOATS _____(feet)
<2> LONGEST BOATS_____(feet)
<3> DON'T KNOW

QUESTION #54
The next questions concern the number of boats you can accommodate, monthly rates, and the number currently occupying your facility by type and size of berth or mooring.

What is your total capacity for slips or tie-ups?

<1> ENTER CAPACITY: _____
<8> DON'T KNOW
<9> REFUSED

QUESTION #56
Are any of these covered?

<1> YES <2> NO <8> DON'T KNOW

QUESTION #57
Considering only the open slips or tie-ups, how many are currently occupied?

<1> ENTER NUMBER OCCUPIED: _____
<2> ALL
<3> NONE
<8> DON'T KNOW

QUESTION #60
What is the average monthly rental rate for an open slip? AN ESTIMATE IS OK

<1> ENTER RATE PER FOOT: _____ OR
<2> ENTER RATE PER BERTH: _____
<8> DON'T KNOW

QUESTION #62
Does this rate include utilities? (circle one)

<1> YES <2> NO <8> DON'T KNOW

QUESTION #63
Do you currently have any open slip vacancies? CIRCLE ONE

<1> YES <2> NO <8> DON'T KNOW

QUESTION #64
What lengths of open slips are currently vacant? CIRCLE ALL THAT APPLY

<1> Under 26 feet
<2> 26 to 39 feet
<3> 40 to 65 feet
<4> Over 65 feet
<8> DON'T KNOW

QUESTION #65
Considering the boundaries of your property, is there room to expand your open slip facilities?

<1> YES <2> NO <8> DON'T KNOW

QUESTION #66
Do your open slips need to be expanded or reconfigured?

<1> YES <2> NO <8> DON'T KNOW

Please answer questions #67 through #77 only if your facility has covered slips (a yes answer to QUESTION #56). If you do not have covered slips, skip to Question #78.

QUESTION #67
What is the total number of covered slips or tie-ups at your facility?

<1> ENTER NUMBER: _____
<8> DON'T KNOW
<9> REFUSED

QUESTION #69
Considering only these covered slips or tie-ups, how many are currently occupied?

<1> ENTER NUMBER OCCUPIED: _____
<2> ALL
<3> NONE

QUESTION #71
What is the average monthly rental rate for a covered slip? AN ESTIMATE IS OK

<1> ENTER RATE PER FOOT: _____ OR
<2> ENTER RATE PER BERTH: _____
<8> DON'T KNOW

QUESTION #73
Does this rate include utilities?

<1> YES <2> NO <8> DON'T KNOW

QUESTION #74
Do you currently have any covered slip vacancies?

<1> YES <2> NO <8> DON'T KNOW

QUESTION #75
What lengths of covered slips are currently vacant? CIRCLE ALL THAT APPLY

<1> Under 26 feet
<2> 26 to 39 feet
<3> 40 to 65 feet
<4> Over 65 feet
<8> DON'T KNOW

***QUESTION #76 ***
Considering the boundaries of your property, is there room to expand your covered slip facilities?

<1> YES <2> NO <8> DON'T KNOW

QUESTION #77
Do your covered slips need to be expanded or reconfigured?

<1> YES <2> NO <8> DON'T KNOW

QUESTION #78
What is the total number of liveaboards permitted for your facility?

<1> ENTER NUMBER: _____
<8> DON'T KNOW
<9> REFUSED

QUESTION #80
How many liveaboards are currently at your facility?

<1> ENTER NUMBER: _____
<8> DON'T KNOW
<9> REFUSED

QUESTION #82
What is the average monthly rate for a liveaboard? AN ESTIMATE IS OK

<1> ENTER RATE PER FOOT: _____ OR
<2> ENTER RATE PER BERTH: _____
<8> DON'T KNOW

QUESTION #84
Does this rate include utilities?

<1> YES <2> NO <8> DON'T KNOW

QUESTION #85
What is the total number of moorings at this facility?

<1> ENTER NUMBER: _____
<8> DON'T KNOW
<9> REFUSED

If your facility has no moorings, skip to QUESTION #91.

QUESTION #87
How many moorings are currently occupied?

<1> ENTER NUMBER OCCUPIED: _____
<2> ALL
<3> NONE
<8> DON'T KNOW

QUESTION #89
What is the typical monthly rate?

<1> ENTER RATE PER FOOT: _____ OR
<2> ENTER RATE PER BERTH: _____
<8> DON'T KNOW

QUESTION #91
About how many days a year does your car parking lot reach capacity? CIRCLE ONE

<1> 1 - 10 DAYS
<2> 11 - 60 DAYS
<3> 61 - 100 DAYS
<4> OVER 100 DAYS
<5> NEVER
<6> NO PARKING LOT
<8> DON'T KNOW

QUESTION #92
During the year 2000, did you ever turn away transient boats for lack of space?

<1> YES <2> NO <8> DON'T KNOW

QUESTION #93
If yes, about how many days did you turn away transient boats last year? CIRCLE ONE

<1> 1 - 10 DAYS
<2> 11 - 60 DAYS
<3> 61 - 100 DAYS
<4> OVER 100 DAYS
<8> DON'T KNOW

QUESTION #94
What is the daily rate for transient boats?

<1> ENTER RATE PER FOOT: _____ OR
<2> ENTER RATE PER SPACE: _____
<3> NO CHARGE
<8> DON'T KNOW

QUESTION #96
Do you have any wooden docks?

<1> YES <2> NO <8> DON'T KNOW

If your facility does not have wooden docks, skip to QUESTION #103.

QUESTION #97
How old are they?

<1> ENTER AGE OF WOODEN DOCKS: _____ (nearest whole year)
<2> NEW THIS YEAR
<8> DON'T KNOW

QUESTION #99
Have significant portions of your wooden docks been added or replaced since they were originally built?

<1> YES <2> NO <8> DON'T KNOW

QUESTION #100
If so, how many years ago were these repairs done? CIRCLE ALL THAT APPLY

<1> This year
<2> 2 to 5 years ago
<3> 6 to 10 years ago
<4> 11 to 20 years ago
<5> 21 to 30 years ago
<6> Over 30 years ago
<8> DON'T KNOW

QUESTION #101
How many more years are your wooden docks expected to last?

<1> ENTER NUMBER OF YEARS: _____ (nearest whole year)
<8> DON'T KNOW

QUESTION #103
Do you have any concrete docks?

<1> YES <2> NO <8> DON'T KNOW

If your facility does not have concrete docks, skip to QUESTION #110.

QUESTION #104
How old are they?

<1> ENTER DOCK AGE: _____ (nearest whole year)
<2> NEW THIS YEAR
<8> DON'T KNOW

QUESTION #106
Have significant portions of your concrete docks been added or replaced since they were originally built?

<1> YES <2> NO <8> DON'T KNOW

QUESTION #107
If so, how many years ago were these repairs done? CIRCLE ALL THAT APPLY

<1> This year
<2> 2 to 5 years ago
<3> 6 to 10 years ago
<4> 11 to 20 years ago
<5> 21 to 30 years ago
<6> Over 30 years ago
<8> DON'T KNOW

QUESTION #108
How many more years are they expected to last?

<1> ENTER NUMBER OF YEARS: _____ (nearest whole year)
<8> DON'T KNOW

QUESTION #110
Do you have docks made of any other materials?

<1> YES (*specify other material*(s): _____)
<2> NO
<8> DON'T KNOW

If your facility does not have docks made of other materials, skip to QUESTION #118.

QUESTION #112
How old are these docks?

<1> ENTER DOCK AGE: _____ (nearest whole year)
<2> NEW THIS YEAR
<8> DON'T KNOW

QUESTION #114
Have significant portions of these docks been added or replaced since they were originally built?

<1> YES <2> NO <8> DON'T KNOW

QUESTION #115
If so, how many years ago were these repairs done? CIRCLE ALL THAT APPLY

<1> This year
<2> 2 to 5 years ago
<3> 6 to 10 years ago
<4> 11 to 20 years ago
<5> 21 to 30 years ago
<6> Over 30 years ago
<8> DON'T KNOW

QUESTION #116
How many more years are these docks expected to last?

<1> ENTER NUMBER OF YEARS: _____ (nearest whole year)
<8> DON'T KNOW

QUESTIONS #118 and #119
Considering your docks, moorings, breakwater, or other waterside facilities, does any part require upgrades such as repair, replacement, expansion or addition? To answer this question, please use the table below to specify whether upgrades are required and if so, the approximate cost, for each of three time periods:

Time Period	Upgrades Needed? CIRCLE ONE			If yes, enter the approximate cost
A. Within Next Two Years	Yes	No	Don't Know	
B. Within 2 to 5 Years	Yes	No	Don't Know	
C. Within 5 to 10 Years	Yes	No	Don't Know	

QUESTIONS #120 AND #121
Considering any landside facility improvements, does any part of your buildings, parking lots, or other landside facilities require upgrades such as repair, replacement, expansion or addition? To answer this question, please use the table below to specify whether upgrades are required and if so, the approximate cost, for each of three time periods:

Time Period	Upgrades Needed? CIRCLE ONE			If yes, enter the approximate cost
A. Within Next Two Years	Yes	No	Don't Know	
B. Within 2 to 5 Years	Yes	No	Don't Know	
C. Within 5 to 10 Years	Yes	No	Don't Know	

QUESTION #122
Does your facility require dredging?

<1> YES <2> NO <8> DON'T KNOW

If your facility does not require dredging, skip to QUESTION #128.

QUESTION #123
How many years ago was the basin last dredged?

<1> ENTER NUMBER OF YEARS: _____ (nearest whole year)
<2> DREDGED THIS YEAR
<8> DON'T KNOW

QUESTION #125
How many years until the basin requires dredging again?

<1> ENTER NUMBER OF YEARS: _____ (nearest whole year)
<2> REQUIRED THIS YEAR
<8> DON'T KNOW

QUESTION #127
Is there an adequate source of funding for your facility's future dredging?

<1> YES <2> NO <8> DON'T KNOW

QUESTION #129
Including materials, labor and contracts, but excluding costs for dredging, what is your annual maintenance budget? AN ESTIMATE IS OK

<1> ENTER MAINTENANCE BUDGET: $ _____
<8> DON'T KNOW

QUESTION #131
If your facility provides boat rentals, what is your annual boat rental income? AN ESTIMATE IS OK

<1> ENTER INCOME: $ _____
<8> DON'T KNOW

QUESTION #133
What do you consider the top 3 boating facility needs the boating area you serve?

1: _____
2. _____
3. _____

QUESTION #139
Do you or your organization own or operate more than one boating facility?

<1> YES <2> NO

QUESTION #140
If yes, what other facilities do you own or operate?

_____
_____

QUESTION #144
Finally, do you have any other comments or suggestions about California's boating facility needs?

_____
_____
_____
_____
_____
_____
_____

Thank you for your help!

Boating Facility Information Sheet

Sample ID		Address1	
Old ID		Address2	
Survey Status		City	
Phone Number		Zip	
Facility Name		County	
Contact Person		Region	

Local Body of Water	
Ownership	
Facility Type	
Notes–Additional Info	

Launch Ramp	☐	Lanes	_____	Rates	_____
Dry Storage	☐	#	_____		_____
Open Berths	☐	#	_____		_____
Covered Berths	☐	#	_____		_____
Moorings	☐	#	_____		_____

Check Boxes:

1. Restrooms	☐	10. Snack bar	☐	19. Lodging	☐
2. Showers	☐	11. Oil disposal	☐	20. Restaurant	☐
3. Carry-down walkways	☐	12. Boat rentals	☐	21. Fish cleaning	☐
4. Sewage or bilge pumpout	☐	13. Convenience store	☐	22. Boat washdown area	☐
5. Fuel sales	☐	14. Haulout and boat repair	☐	23. Transient berths or tie-ups	☐
6. Shore boat service	☐	15. Swimming area	☐	24. Water on dock	☐
7. Launching valet service	☐	16. Fishing tackle sales	☐	25. Electric on dock	☐
8. Campsites	☐	17. Ice vending	☐	26. Phone service on dock	☐
9. Day-use or picnic areas	☐	18. Gear lockers	☐	27. Cable TV on dock	☐
				28. Laundry	☐

Notes: _____

_____

Sources: _____

_____

Date Completed: _____

Appendix D

California Regional Workshops

Appendix D1
Workshop Methodology and Results

Appendix D1 Workshop Methodology and Results

1. Introduction

We conducted twelve workshops statewide in August and October of 2001 for the California Boating Facilities Needs Assessment (BNA). The purpose of this series of workshops was to gather information and feedback from the public about California's boating facilities, and to identify recommendations for improvements, additions, and new facilities. It was the intent of the Department of Boating and Waterways to hear opinions about the welfare of the State's waterways as perceived by the general public, professionals in the industry, and the different organizations and public agencies that utilize the State's water resources. The workshop attendees were asked to concentrate on issues that focused around (1) public and private facilities, marinas, launch ramps, and support facilities; (2) needs for improvement, additions to existing facilities, and needs for new facilities; and (3) boating issues that involved facility improvements, additions, or new developments.

There were a total of 12 workshops conducted throughout the State, one in each of the 10 regions, plus two additional workshops, one held in the Sacramento region, and one held in the South Coast region. The additional two workshops were needed due to the size of those regions and the number of boaters and waterways. The ten regions and counties within each region are shown in **Exhibit D.1** and **Table D.1**.

Exhibit D.1

The Ten California BNA Regions

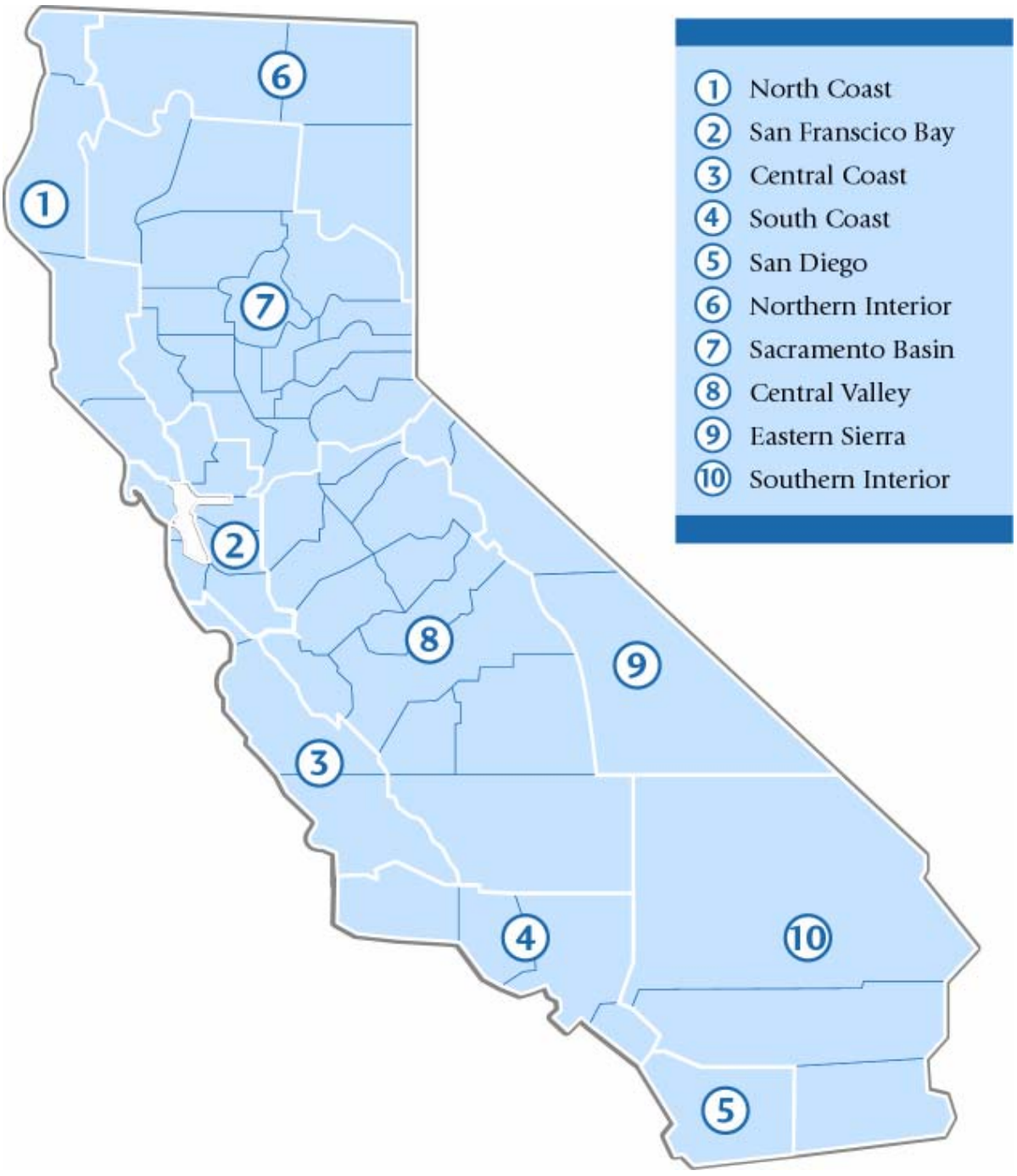


Table D.1
Counties within Each California BNA Region

1. North Coast	6. Northern Interior
■ Del Norte ■ Humboldt ■ Mendocino ■ Sonoma	■ Lassen ■ Modoc ■ Siskiyou
2. San Francisco Bay Area	**7. Sacramento Basin**
■ Alameda ■ Contra Costa ■ Marin ■ Napa ■ San Francisco ■ San Mateo ■ Santa Clara ■ Solano	■ Butte ■ Colusa ■ El Dorado ■ Glenn ■ Lake ■ Nevada ■ Placer ■ Plumas ■ Sacramento ■ Shasta ■ Sierra ■ Sutter ■ Tehama ■ Trinity ■ Yolo ■ Yuba
3. Central Coast	**8. Central Valley**
■ Monterey ■ San Luis Obispo ■ Santa Cruz	■ Amador ■ Calaveras ■ Fresno ■ Kern ■ Kings ■ Madera ■ Mariposa ■ Merced ■ San Benito ■ San Joaquin ■ Stanislaus ■ Tulare ■ Tuolumne
4. South Coast	**9. Eastern Sierra**
■ Los Angeles ■ Orange ■ Santa Barbara ■ Ventura	■ Alpine ■ Inyo ■ Mono
5. San Diego	**10. Southern Interior**
■ San Diego	■ Imperial ■ Riverside ■ San Bernardino

2. Workshop Locations and Approach

For each of the State's ten regions, the workshops locations were selected to be near large population centers, near or at the major waterways, and centrally located to allow participants to travel to the meetings. Workshop dates and locations are listed in **Table D.2**.

Table D.2
Workshop Locations and Dates

Region	Location	Date
1. North Coast	Eureka	Aug. 16, 2001
2. San Francisco Bay	Oakland	Oct. 18, 2001
3. Central Coast	Monterey	Aug. 31, 2002
4. South Coast	Long Beach Ventura	Aug. 8, 2001 Aug. 7, 2001
5. San Diego	San Diego	Aug. 9, 2001
6. Northern Interior	Susanville	Aug. 15, 2001
7. Sacramento Basin	Sacramento Redding	Oct. 1, 2001 Aug. 14, 2001
8. Central Valley	Turlock	Aug. 1, 2001
9. Eastern Sierra	Mammoth Lakes	Aug. 22, 2001
10. Southern Interior	Needles	Aug. 23, 2001

Working from a list of contacts from the DBW, we identified meeting locations and dates for all of the workshops. Workshop publicity was achieved through a number of methods:

- A workshop flier was mailed to all facilities in the region in the DBW facility database
- Local workshop contacts were given additional fliers to distribute to other interested groups
- Calendar announcements were placed in local newspapers and boating publications
- Advertisements were placed in selected local newspapers and boating publications
- Press releases were provided to local contacts and newspapers.

Samples of the fliers are provided in **Section 2** of this Appendix. Workshop attendees most often learned of the workshops through the mailings or fliers, although several heard of the workshops through newspapers. None of the participants learned of the workshops through boating magazines.

Each workshop followed the same general format. After a 15 to 20 minute overview presentation, workshop participants were allowed to comment, discuss, and identify facility needs or other issues of concern in their region. A copy of the workshop presentation for one region (the San Francisco Bay Region) is included in **Section 3** of this Appendix. Each presentation was customized to include a map and list of waterways in the region; all other aspects of the presentation were the same. Workshops lasted from one to over two hours, depending on the number of participants and the number of issues in the region. The number of participants at each workshop ranged from three to seventeen. Although these numbers were relatively small, the level of interest and expertise of these participants was high. Many participants were public or private facility managers with a high level of awareness of facility needs in their region. **Table D.3** and **Table D.4** provide information on the workshop participants.

Table D.3
Number of Workshop Participants

Region	Location	Number of Attendees
1. North Coast	Eureka	4
2. San Francisco Bay	Oakland	7
3. Central Coast	Monterey	3
4. South Coast	Long Beach	17
5.	Ventura	7
6. San Diego	San Diego	9
7. Northern Interior	Susanville	6
8. Sacramento Basin	Sacramento	3
9.	Redding	15
10. Central Valley	Turlock	7
11. Eastern Sierra	Mammoth Lakes	11
12. Southern Interior	Needles	5
Total		94

Table D.4
Affiliation of Workshop Participants

Affiliation	Number
Public Facility Staff or Management	42
Private Facility Staff or Management	15
Law Enforcement	11
Boating Group	11
Boating Public	7
Non-Motorized or Environmental Group	4
Media	2
Lifeguard/Medical	2
Total	94

We prepared a workshop briefing report for most of the events, including location and contact information, a summary of publicity outreach, attendees, and a workshop overview. We also prepared summaries of key waterways, or "hot spots" in each region as background. In addition, problems and facility needs on specific waterways identified by workshop participants are included in the tables in Volume II, Regional Boaters and Boating Facilities.

3. General Workshop Results

The discussion in this section focuses on findings from the twelve regional workshops. The tone of these meetings, while appreciative of the opportunity to express concerns about boating issues, reflected an increasingly vocal group of DBW stakeholders. Interestingly, participants from Susanville to San Diego voiced many similar concerns. Many concerns, presented in this section[1], are also supported by our findings in the Facility, Law Enforcement, and Boater Surveys.

Workshop participants identified five general factors that influence California boating facility needs:

- External influences
- Varied and distinct boater groups
- Equity and allocation concerns
- Environmental issues
- Facility conditions.

This section discusses these issues and general facility needs identified by workshop participants in each of these categories.

[1] Two key issues are not discussed in this report because they are not facility related: (1) law enforcement issues, and (2) boater education, safety, and licensing issues. These were identified needs for which we obtained significant feedback, including the need for increased enforcement personnel on many waterways, concerns with speed violations, wakes, BUIs, PWCs, "big weekends", requests for more boater education, and growing support for requiring a boater license.

a. External Influences

There are five categories of external influences that workshop participants identified, and were concerned about. While many of these are beyond the scope of the DBW, they influence facility needs, and thus warrant consideration. The five areas and key points within each area are presented below:

1. Americans with Disabilities Act (ADA) Requirements for Boating Facilities
   - Most older facilities are non-compliant
   - There are many concerns over liability and lawsuits at non-compliant facilities
   - Facility managers would like DBW interpretation and guidance on requirements
   - Facility managers would like funding to help meet compliance requirements.
2. Environmental Regulations (CEQA, ESA, Permits, etc.)
   - Facilities have difficulties in understanding and obtaining necessary environmental permits
   - In many areas it is difficult or impossible to permit facility expansions, dredging, and new facilities
   - Facility managers would like the DBW to help coordinate permitting, and provide leadership and technical assistance in this area; in particular they would like to see the DBW in a role as facilitator and coordinator with other state and federal agencies.
3. State Marine Life Protection Act
   - Limitations on California coastal fishing will impact coastal marinas and boating demand in upcoming years
   - Full impacts are yet unknown
   - Recreational fishermen would like the DBW to provide leadership and a voice in this area.
4. Weather Influences
   - Marinas consistently impacted by periodic storms and flooding
   - Need for storm damage contingency funding in coastal areas and inland flood areas
   - Water level fluctuations expand facility needs at many inland reservoirs
   - Identified need for storm damage contingency funding
   - Identified need for help with supplemental low and high water facilities.
5. Economic Influences
   - Marina and boating industry are highly susceptible to economic downturns
   - Possible reduced boater demand, especially for mid-size power boats is likely over the next few years
   - State may find more boats kept on trailers, and increased number of marina slip vacancies
   - Less impact is likely on high-end boats and smaller boats (hand-powered and PWC)
   - Facility operators would like the DBW to provide technical assistance with determining boater demand, market trends, and a coordinated approach for waterways and regions.

b. Varied and Distinct Boater Groups

California's boater population consists of many diverse groups. The number and types of boats and boaters changes over time, much faster than facilities can respond to their needs. Changes and needs in the following five groups have implications for facility needs statewide:

1. Large Boats (over 40 feet)
   - Relatively small number of these boats
   - Need longer, wider, and fewer slips
   - Have a large economic significance that drives marina economics
   - Have material facility needs for retrofits of marinas, new slip configurations, amenities, and security
   - Significant equity concerns – are some facilities built for only high-income, large boat owners?
2. Smaller Trailerable Boats (26 feet or under)
   - Relatively large number of these boats
   - Increasing numbers of, and increasing size of, boats on trailers
   - Generate a large share of funding through gas taxes
   - Have material facility needs for more launch ramps and support facilities and upgrades for aging launch ramp facilities.
3. Personal Water Craft (PWC)
   - Large number of these craft and fast growing boater market
   - Have new and separate infrastructure requirements
   - Are a high use group, reflected in number of boating trips and trip expenses
   - Have material facility needs for PWC launch ramps, beach facilities, and designated use areas.
4. Paddlers (Canoes, Kayaks, Rafts, Sailboarders et. al.)
   - Fast growing user group
   - Does not provide gas tax revenues
   - Have low-tech facility needs for carry-down walkways, gravel parking, and restrooms
   - Have material facility needs for new and separate infrastructure and boater trails.
5. Smaller Non-Trailerable Boats (20 to 40 feet)
   - Declining population
   - Resulting in marinas with a large number of vacant berths in the 20 to 40 foot range
   - Exacerbated by the shift to dry storage and trailers
   - Supports facility needs for new slip configurations to eliminate smaller slips and new launch ramps since fewer boats kept in marinas.

c. Equity and Allocation Concerns

Workshop participants raised several issues related to equity among regions of the state, boat types, and facility types. These are issues that the DBW should be aware of, although they may not be in a position to act on them at this time. For instance, some stakeholders are concerned about the potential large disconnect between sources and uses of DBW program funds. The fact that there are more different bodies of recreational waters in Northern California than Southern California, for example, is a major reason for the allocation difference.

Equity and allocation concerns also stem from the many types of boats in the State, as discussed above. Workshop participants mentioned eight specific areas of concern:

- Significant Northern California facilities versus significant Southern California funding sources
- Many more DBW funded projects in Sacramento Basin, San Francisco Bay, and Central Valley than South Coast, San Diego, and Southern Interior
- Motor vessel funding sources versus sail boater and paddler needs
- Gas boating funding needs versus diesel motor vessel and sailboat needs (there is still a small sailboat marina need)
- Larger boat marina needs versus smaller recreational/trailerable boat funding
- Commercial boat facility funding versus recreational facility funding (fewer joint facilities)
- More assistance to public facilities versus larger number of private facilities
- More assistance to State land facilities versus other facility needs.

d. Environmental Issues

Workshop respondents raised concerns about environmental issues in four specific areas. The DBW has programs in place to deal with a few of these issues in some locations, but respondents generally were concerned that additional assistance from the DBW or other public agencies is needed to handle these growing problems.

1. Waste, Hazardous Materials, and Recycling Issues
   - Hazardous materials collection and disposal facilities (diesel/gas sludge, batteries, paints, bottom paints, radiators, varnishes, etc.)
   - Pump out stations for oil and bilge – new facilities and maintenance of existing stations
   - Fuel facilities – new facilities and reducing spills and leaks
   - Recycling facilities – cans, bottles, antifreeze, oil, etc.
2. Abandoned Vessels, Trailers, and Vehicles Issues
   - Abandoned Vessel Act helps, but needs still exist
   - Federal fish permit buyback creates complexities
   - Trailers and vehicles increasingly abandoned.
3. Weed Control Issues
   - Aquatic weed control problems increasing in lakes, reservoirs, and rivers.
4. Conservation Issues
   - Conservation of depleted boat-related natural resources is critical to maintain the State's boating appeal
   - Coastal beach erosion programs are needed to replenish eroding beaches, especially in Southern California
   - Water quality concerns should be addressed so as to continue to attract and maintain interest in boating.

e. *Facility Conditions*

In terms of facility conditions, participants raised five key issues and funding needs areas:

- Few remaining major facility sites left
- Shift away from new capital outlay needs
- Shift to deferred maintenance, capital outlay replacements, and retrofit needs
- Need for dredging funding and support
- Specific high frequency infrastructure and funding support needs.

1. Few Remaining Major Facility Sites Left
   - Limited inland waters in South, increasing demand for Northern inland waterways
   - Good coastal sites almost all built-out, few coastal locations left, competition with higher value uses
   - Limits on expansion in Marine Sanctuaries, permit difficulties
   - Good inland sites almost all gone, most available reservoirs have facilities in place.
2. Shift Away From New Capital Outlay Needs
   - Shift away from DBW's historic role of funding for new marinas
     - With the exception of more launch ramps and support facilities
     - With the exception of dry storage facilities.
3. Shift to Deferred Maintenance, Capital Outlay Replacements, and Retrofit Needs
   - Aging infrastructure statewide
   - Existing facilities are aging (20 to 30 years-plus)
   - Many facilities are in disrepair, with high deferred maintenance needs
   - Many facilities have not kept up with capital outlay replacement needs
   - Many current facilities are not designed for today's boater market
   - Stakeholders have requests for new funding needs:
     - Want to take care of existing facilities now, and they don't want to wait until they are further deteriorated
     - Request for grants or loans for maintenance
     - Want to move from DBW new facility funding to support of existing facilities.
   - Cumulative resource funding needs are likely to exceed available DBW resources with requests for:
     - Retrofits and renovations of marinas
     - New launch ramps
     - Renovation of aging launch ramps
     - Support facilities: both new and replacements
     - Special use facilities such as PWC and paddlers
     - ADA funding assistance
     - Dredging funding assistance.

4. Need for dredging Funding and Support

- Many facilities are becoming unusable because of marina and launch ramp siltation problems
- Stakeholders would like DBW to provide political, institutional, financial, and technical leadership
- Stakeholders also need help with breakwater repair and rehabilitation for both barriers and basins
- There are major stakeholder needs beyond direct dredging funding, including:
  - Coordination with other agencies
  - Soil test analyses and environmental work
  - Permits, EIRs, blanket permits, etc.
  - Disposal of dredged materials
  - Mitigation offsets.

5. Specific High Frequency Infrastructure and Funding Support Needs

- Destination boating infrastructure needs
  - Stakeholders request DBW-level planning and mapping leadership
  - Need for DBW help with marina-level policies and planning to encourage and accommodate transient boats
  - Stakeholders would like DBW funding and technical assistance for:
    - — Transient docks
    - — Mooring buoys
    - — Courtesy docks
    - — Boarding floats.
- Directional Signage Needs for funding and technical assistance
  - Signage needs to be consistent and easily identifiable
  - Need for additional and new:
    - — Turning signs
    - — Hazard signs
    - — Speed limit signs
    - — No Wake signs
    - — Information signs and facility location signs.
- Restrooms: need for DBW funding and technical assistance for:
  - Additional restroom facilities and upgrades
  - Land-based restroom facilities near water
  - Low water years create siting difficulties (floating restrooms popular in many locations)
  - Maintenance an issue for floating restrooms in particular.
- Parking: need for DBW funding and technical assistance for:
  - Parking capacity that should match waterway and facility capacity
  - Increasing demand for trailer parking and launch ramps
  - Changing lot configurations because of PWCs, bigger vehicles, bigger trailerable boats, etc.
  - ADA parking needs
  - Low water years create parking difficulties at many reservoirs.

- Security and Amenities
  - Many marinas still need to upgrade facilities
  - Increased demand by large boat owners for:
    - — Marina gate locking systems
    - — Computer security needs
    - — Parking lot surveillance or barriers
    - — Amenities such as electrical, telephone, cable TV, DSL lines, etc.
- Dry Storage
  - Evaluate potential for more dry storage in California
  - Could provide solution for capacity problems in some areas
  - Up to now dry storage has not been popular in California as compared to East Coast
    - — Less demand due to weather
    - — Other higher-value uses for coastal land
    - — Popularity of keeping boat on own property.

4. Summary

The twelve workshops were an important component of the extensive information-gathering effort of the BNA. In addition to the information obtained on specific waterway needs and on the concerns and issues of importance to facility operators that are discussed above, the workshops served to improve the already high public opinion of the DBW. Workshop participants in all regions, particularly those in Southern California and the more remote areas in the North State, appreciated the effort that DBW took to reach out and to listen to their concerns. The workshops also served as a way to validate the results of the three major surveys conducted in the BNA, the Facility Survey, Boater Survey, and Law Enforcement Survey.

While generally successful, there were a few lessons learned from the workshops. Low participation was a concern at several workshops. Although those who did participate were very knowledgeable and provided a significant amount of input, there were certainly many others that did not attend. Sometimes, scheduling was an issue. Workshops held mid-week were best attended. Also, two workshops were rescheduled at the last minute due to outside circumstances, potentially reducing attendance. A significant lead-time, easy-to-reach workshop location, early evening, or evening workshop time, mailings to potential attendees, and ads and announcements in local newspapers all appeared to contribute to a workshop's success. Workshop attendees seemed to appreciate the short presentation at the beginning of the workshop for background information, and the fact that they were given the majority of the workshop time to provide input. While the workshops required a considerable amount of work and resources, we believe they should continue to be a component of future facilities needs assessments for both their public outreach and information-gathering benefits.

Appendix D2
Examples of Publicity Materials

Fliers

California Boating Facilities Regional Public Workshops

The California Department of Boating and Waterways would like to hear from you:

Do boating facilities in your area meet your needs?

What facilities are working well?

What facilities or services need improvement?

What new facilities should be developed?

Let us hear your opinions.

Come to the workshop in your region on:

August 7, 2001

From 7 pm to 9 pm at the

The Government Center
Hall of Administration
800 South Victoria Ave.

Ventura

If you have questions, please call Carrie Scott at 916-278-4867. This workshop is part of a series of twelve workshops to be conducted statewide for the California Boating Needs Assessment. Information obtained at the workshops will help Cal Boating determine how to allocate funds for new boating facilities and facility improvements.

California Boating Facilities Regional Public Workshops

The California Department of Boating and Waterways would like to hear from you:

Do boating facilities in your area meet your needs?

What facilities are working well?

What facilities or services need improvement?

What new facilities should be developed?

Let us hear your opinions.

Come to the workshop in your region on:

August 1, 2001

From 7 pm to 9 pm at the

CSU Stanislaus,
South Dining Room,
801 West Monte Vista Avenue

Turlock

If you have questions, please call Carrie Scott at 916-278-4867. This workshop is part of a series of twelve workshops to be conducted statewide for the California Boating Needs Assessment. Information obtained at the workshops will help Cal Boating determine how to allocate funds for new boating facilities and facility improvements.

Appendix D3
Workshop Presentation – San Francisco Bay Region

California Boating Facilities Needs Assessment

Regional Public Workshops

California Department of Boating and Waterways (DBW)

What is the purpose of this workshop?

- Gather information and feedback about California's boating facilities
- Hear your recommendations for improvements, additions, and new facilities
- Help the DBW determine and prioritize funding for facilities

What is the California Boating Facilities Needs Assessment?

- Comprehensive year-long study of California boating facilities:
  - Types and locations of facilities
  - Conditions of facilities
  - Need for new and improved facilities
  - Boater demand for facilities

What is the California Boating Facilities Needs Assessment? *(continued)*

- Assessment includes:
  - Telephone survey of 4,000 boaters statewide
  - Telephone survey of all boating facilities
  - Interviews with boating law enforcement officers
  - Twelve public workshops
  - Review of prior reports, studies, and databases
  - Recommendations to the DBW for funding recreational boating facilities

Primary Objective

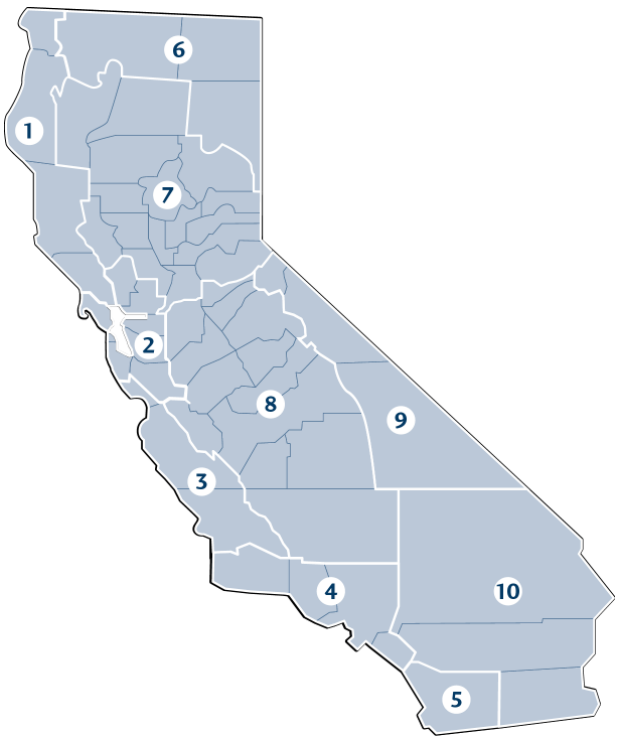
Plan and develop boating facilities in environmentally acceptable areas with priority on development or expansion of facilities where the greatest needs exist.

- Loans to public agencies for small craft harbors
- Loans to private entities for recreational marinas
- Grants to public agencies for boat launching facilities and restrooms
- Capital outlay program for projects on State controlled property
- Funded through boating gasoline taxes and loan repayments

Ten State Regions

Coastal	Inland
1. North Coast	6. Northern Interior
2. San Francisco Bay Area	7. Sacramento Basin
3. Central Coast	8. Central Valley
4. South Coast	9. Eastern Sierra
5. San Diego	10. Southern Interior

Ten State Regions *(continued)*



San Francisco Bay Region

Napa
Marin
Solano
Contra Costa
Alameda
San Francisco
San Mateo
Santa Clara

Workshop Organization

- Discussion will focus on waterways in this region
- List of waterways for this region

San Francisco Bay Waterways

Anderson Lake
Bethany Reservoir
Carquinez Strait
Coyote Lake
Del Valle Reservoir
Lagoon Valley Lake
Lake Berryessa
Lake Elizabeth
Lake Hennessey
Lake Merritt
Lake Solano
Mare Island Strait
Napa River
Oakland Estuary
Pillar Point Harbor
Sacramento–San Joaquin Delta
San Francisco Bay
San Leandro Bay
Suisun Bay
Tomales Bay

Workshop Organization *(continued)*

- Any waterways not listed that we should be considering?
- Any waterways out of the region you would like to discuss?

Scope of Workshop

What is the scope of this workshop?

- Public and private facilities
- Marinas, launch ramps, and support facilities (restrooms, parking facilities, administrative buildings, and day use areas)
- Needs for improvements and additions to existing facilities and needs for new facilities
- Boating issues that involve by facility improvements, additions, or new developments

Scope of Workshop *(continued)*

What is not in the scope of this workshop?

- Incompatible boating use issues with no facility context
- Boating safety/health issues with no facility context
- Boating law enforcement issues with no facility context

Workshop Rules

- All speakers complete a 3x5 card identifying name, telephone number, and topic(s)
- One person speaks at a time
- Be courteous and constructive
- All opinions are welcomed and encouraged
- Make no value judgements on any opinions
- Stay on topic
- Speaker time limits based on number of individuals who would like to speak

California Boats

- 1.02 Million Boats in the State
  - 925,000 Registered
  - 97,000 Non-registered
    (hand-powered)
- 2.65 Boats per 100 people

Registered Boats – Lengths

❑ Less than 16 feet	458,000	(50%)
❑ 16 up to 26 feet	404,000	(44%)
❑ 26 up to 40 feet	49,000	(5%)
❑ Over 40 feet	14,000	(1%)
Total	925,000	(100%)

Registered Boats – Propulsion Types

❑ Outboard Motor	357,000	(39%)
❑ Jet Propulsion and PWC	193,000 (PWC 166,000)	(21%)
❑ Inboard/Outboard Motor	189,000	(20%)
❑ Inboard Motor	83,000	(9%)
❑ Sail (with or without auxiliary)	54,000	(6%)
❑ Other Propulsion	49,000	(5%)
Total	925,000	(100%)

California Boating Facilities

- 300 publicly owned (37%)
- 500 privately owned (63%)

Total 800 (100%)

- 450 marinas (56%)
- 300 ramps/recreation areas (38%)
- 50 clubs, resorts, other (6%)

Total 800 (100%)

California Boaters

- Average age 53
- Average number of boating trips per year 25
- Percent of boaters that store boat at their residence 68%

Why do you boat at your favorite waterway?

1. Close to home
2. Good fishing
3. Convenience
4. Like the place
5. For pleasure

What are the problems at your favorite waterway?

1. Security in the parking area
2. Inadequate maintenance
3. Crowds
4. Boat ramps too shallow
5. Poor water quality

Why don't you boat at a waterway?

1. Distance from home
2. Poor water quality
3. Insufficient water depth
4. Need more launch ramps
5. Crowds

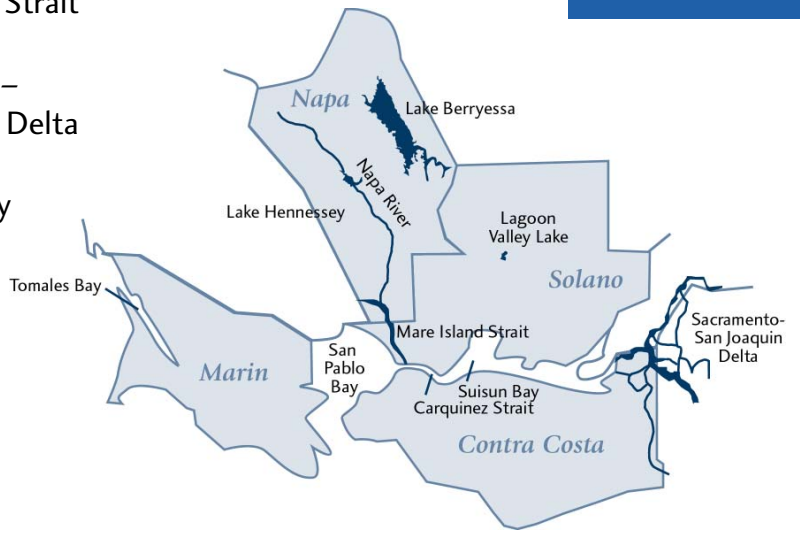
What are your recommendations for facility improvements?

1. Increase launching capacity
2. General facility improvements and repairs to ramps and docks
3. More capacity - add facilities
4. Dredging
5. Add docks

San Francisco Bay Locations

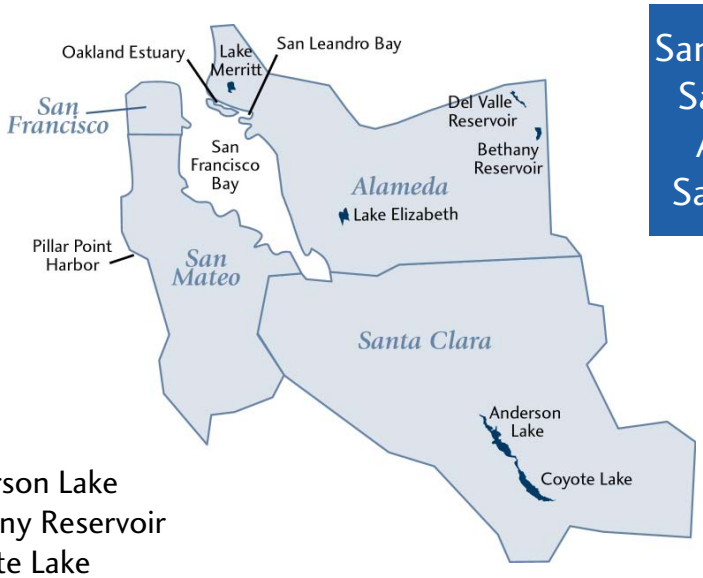
- Carquinez Strait
- Lagoon Valley Lake
- Lake Berryessa
- Lake Hennessey
- Lake Solano
- Mare Island Strait
- Napa River
- Sacramento–San Joaquin Delta
- Suisun Bay
- Tomales Bay

Marin
Napa
Solano
Contra Costa



San Francisco Bay Locations *(continued)*

San Francisco
San Mateo
Alameda
Santa Clara



- Anderson Lake
- Bethany Reservoir
- Coyote Lake
- Del Valle Reservoir
- Lake Elizabeth
- Lake Merritt
- Oakland Estuary
- Pillar Point Harbor
- San Francisco Bay
- San Leandro Bay

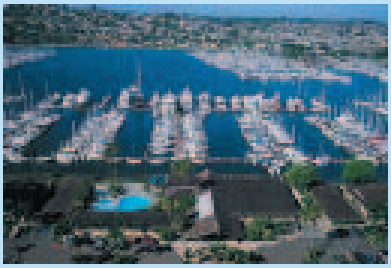
Any other waterways

- Inside this region?
- Outside this region?

Thank You

- Completed BNA available on DBW web site www.dbw.ca.gov next summer
- Results will lead to facility funding recommendations over the next several years
- Additional comments, thoughts, suggestions by email or telephone to:
  - Carrie Scott at (916) 278-4867 or scott@csus.edu

Addendum



Database Inventory of Boating Facilities

Addendum Database Inventory of Boating Facilities

Available on CD-ROM

BNA Facilities Database